

**2004**  
**REPORT TO CONGRESS**  
*of the*  
U.S.-CHINA ECONOMIC AND  
SECURITY REVIEW COMMISSION

ONE HUNDRED EIGHTH CONGRESS  
SECOND SESSION

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JUNE 2004

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Printed for the use of the  
U.S.-China Economic and Security Review Commission  
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## U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

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The Commission was created in October 2000 by the Floyd D. Spence National Defense Authorization Act for 2001 sec. 1238, Public Law 106-398, 114 STAT. 1654A-334 (2000) (codified at 22 U.S.C. sec. 7002 (2001)), as amended, and the "Consolidated Appropriations Resolution of 2003," Public Law 108-7, dated February 20, 2003. Public Law 108-7 changed the Commission's title to U.S.-China Economic and Security Review Commission.

The Commission's full charter is available via the World Wide Web: <http://www.uscc.gov> and begins in Appendix I, page 233.

### IN MEMORIAM

This Report is dedicated to the memory of the Honorable Robert A. Bean, who served the Commission with distinction as a key advisor and director of Congressional and public affairs. He was a trusted and highly valued close advisor and good friend to the Chairman, Vice Chairman, Commission Members and staff. Bob's passing on May 14, 2004, was tragic and untimely. He will be deeply missed by all who knew him.

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

JUNE 10, 2004

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House of Representatives, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit our second annual Report to the Congress, pursuant to Public Law 106-398 (October 30, 2000), as amended by Division P of P.L. 108-7 (February 20, 2003). The Commission has again reached a broad and bipartisan consensus, this year approving the Report by a unanimous vote of all eleven Commissioners (11-0), on the most important aspect of our mandate, "to monitor, investigate, and report to Congress on the national security implications of the bilateral trade and economic relationship between the United States and the People's Republic of China."

The Report includes a detailed treatment of our investigations into the areas identified by the Congress for our review and recommendations in the amendments of 2003. These areas are: China's proliferation practices, China's economic reforms and U.S. economic transfers to China, China's energy needs, Chinese firms' access to the U.S. capital markets, U.S. investments into China, China's economic and security impacts in Asia, U.S.-China bilateral programs and agreements, China's record of compliance with its World Trade Organization (WTO) commitments, and the Chinese government's media control efforts.

The Report is organized into an Executive Summary, which highlights our general assessments, conclusions and key recommendations in the areas of investigation, and is followed by detailed treatment of each area in nine separate chapters. We believe the level of bipartisan consensus the Commission has achieved is significant given the number of controversial issues the Congress directed us to investigate, and the continuing and growing concern over the direction of the U.S.-China relationship politically, economically and strategically over the next decade or more. We have operated under a key assumption of our mandate, that the United States' economic health and well-being are a fundamental national security matter, including the maintenance of a strong manufacturing base, a vigorous research and development capability, the ability to maintain our global competitiveness and a healthy employment level and growth rate.

This Commission arose from the debate that led the Congress to approve Permanent Normal Trade Relations (PNTR) for China and U.S. support for China's admission to the WTO, despite the fact that China clearly had not achieved the level of free market development normally required for WTO membership. The administration argued strenuously during that debate that including China in the world trading system would lead to political reform and a more open Chinese society to accompany the development of market economics. These expectations have, so far, been disappointed by China's lack of progress on any important measurements of political reform, human rights, openness, and the building of democratic institutions. That is the central dilemma of our bilateral relationship: that China remains an undemocratic, authoritarian state, while it is opening its market and seeking the respect and support of its trading and investment partners. This gap between our political and value systems is magnified by the fact that we compete for economic and political influence in Asia. As a result, the U.S.-China relationship is variously categorized as strategic engagement and competition. In some areas there is promising cooperation, in others sharp antagonism.

Certain fundamental issues have guided the Commission's work, and they span the broad range of topics mandated for review by the Congress. Those central issues include the questions of China's progress in four broad areas: (1) market reforms and trade commitments, (2) cooperation with the United States on national security matters, (3) policies toward openness, human rights, democracy-building, and the rule of law, and (4) the quality of the overall bilateral relationship. In most of these areas, the Commission believes China's progress has been far less than satisfactory, and that it is in the U.S. interest to continue to press China to do more. On the range of questions dealing with openness, human rights, democracy-building, and the rule of law, the Commission believes China simply fails to meet a minimal standard of progress.

This Report includes a number of recommendations for Congressional action, ranging from fair dealing in a range of economic arenas, to policies on media openness, to diplomatic strategies such as in the case of North Korea's nuclear weapons program. Some of these recommendations involve renewed efforts to cooperate with the Chinese in a number of areas where we believe the United States must use its influence to encourage China to live up to its commitments and to act as a responsible world power. In all cases, our success will depend to a large extent on the level of cooperation between the executive branch and the Congress on fashioning policies for dealing with China. Success will also depend on other countries actively engaging in a cooperative process with the United States.

The Commission believes that U.S. policies must be firmly grounded on the calculus of what will strengthen and advance our nation's economic health and national security—in a nutshell, our national interests. Second, although it is unrealistic to expect the United States to fundamentally transform the beliefs, structures, and governing dynamics of China's Communist dictatorship, we should continue to advocate strongly democratic values and principles, remembering that in the past strong American actions and influence have successfully brought about such values and practices in Japan, South Korea, the Philippines and Taiwan. On both scores, we can and should do better.

The Commission used a number of approaches to conduct its work on behalf of the Congress, including holding eleven public hearings on a broad range of topics, including field hearings in Columbia, South Carolina, and San Diego, California; new research in a variety of relevant areas; classified briefings from the intelligence community; and fact-finding visits to Asia and also the WTO in Geneva. We published complete hearings records, together with preliminary findings and recommendations in separate volumes for each of our hearings. The original research funded by the Commission is also posted on our Web site ([www.uscc.gov](http://www.uscc.gov)).

We believe that this Report will provide a baseline for assessing progress and challenges in the U.S.-China relationship. We believe that the relationship is still in a fluid state and that the United States has an historic opportunity to help move China in directions that will be beneficial for its own development and for peaceful bilateral relations with the United States, the Asian region and the world community. In many ways, we believe the direction of the world trading system, and so-called globalization, will be significantly influenced by the progress that is made in our bilateral relationship. We encourage the Congress to become a genuine partner with the administration in formulating and evaluating this complicated and many-faceted relationship because we are persuaded that the quality and success of American policies toward China are far more likely to succeed if they originate from a bipartisan consensus with the administration. We hope this Report and the continued work of the Commission will contribute to facilitating and informing that process.

Yours truly,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*

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## EXECUTIVE SUMMARY

This Report sets forth the Commission's analysis of the U.S.-China relationship in the designated areas of investigation in our Congressional mandate: China's proliferation practices, China's economic reforms and U.S. economic transfers to China, China's energy needs, Chinese firms' access to the U.S. capital markets, U.S. investments into China, China's economic and security impacts in Asia, U.S.-China bilateral programs and agreements, China's record of compliance with its World Trade Organization (WTO) commitments, and the Chinese government's media control efforts. Our analysis, along with recommendations to the Congress for addressing identified concerns, is chronicled in the Report's nine chapters, and summarized herein.

### OVERALL ASSESSMENT OF ECONOMIC AND SECURITY CHALLENGES

Along with specified areas of investigation, Congress gave the Commission the overarching mission of evaluating on an annual basis "the national security implications of the bilateral trade and economic relationship between the United States and the People's Republic of China (PRC)." As reflected in our Congressional mandate, the Commission takes a broad view of "national security" in making this assessment. We have attempted to evaluate how the U.S. relationship with China affects the economic health of our nation, our industrial base, the military and weapons proliferation dangers we face, and our political standing and influence in Asia. Taken together, these elements paint a full picture of how the relationship impacts our broader national security interests.

*Based on our analyses to date, as documented in detail in our Report, the Commission believes that a number of the current trends in U.S.-China relations have **negative implications** for our long-term economic and national security interests, and therefore that U.S. policies in these areas are in need of urgent attention and course corrections.*

Nonetheless, the Commission believes that the time is ripe for putting the U.S.-China relationship on a more solid, sustainable footing from the perspective of long-term U.S. interests. The U.S.-China relationship is still in the relatively early stages of its development and is marked by a fluid rather than static environment. The United States has played—and continues to play—an enormous role in the economic and technological development of China. As the Commission has documented through our hearings and reports, U.S. trade, investment, and technology flows have been a critical factor in China's rise as an economic power. We need to use our substantial leverage to develop an architecture that will help avoid conflict, attempt to build cooperative practices and institutions, and advance both countries' long-term interests. The United

States has the leverage now and perhaps for the next decade, but this may not always be the case. We also must recognize the impact of these trends directly on the domestic U.S. economy, and develop and adopt policies that ensure that our actions do not undermine our economic interests.

When the Congress approved Permanent Normal Trade Relations (PNTR) for China, the guiding premise was that it would expand market access for U.S. goods and services and, more fundamentally, would lead to economic reform in China and, eventually, political reform. In this context, it was characterized as in our “national security interest” to support China’s accession to the WTO. Having taken this significant step, the United States cannot lose sight of these important goals, and must configure its policies toward China to help make them materialize—from expanded trade opportunities for U.S. exporters and a mutually beneficial trade relationship that sets global standards for fair trade, to an open, more democratic society in China that can be an important partner in addressing regional and global security challenges, including weapons proliferation, terrorism, and peaceful resolution of the cross-Strait situation.

The Commission examined in depth the extent of ongoing cooperation between China and the United States on traditional national security matters, most particularly China’s assistance in resolving the North Korea nuclear weapons crisis. The Commission believes that China’s performance in this area to date has been unsatisfactory, and we are concerned that U.S. pressure on trade disputes and other unrelated aspects of the relationship may have been toned down by the administration as a concession for China’s hoped-for cooperation on this and other vital security matters. The Commission believes that any real progress with China on both the trade and security fronts will require the use of substantial and continuing leverage on the part of the United States.

If we falter in the use of our economic and political influence now to effect positive change in China, we will have squandered an historic opportunity. We believe China demonstrated a willingness to move in a positive direction, and to take substantial risks to do so, when it entered the WTO. But China will likely not initiate the decisive measures toward more meaningful economic and political reform without substantial, sustained, and increased pressure from the United States. And while the United States must pursue its own interests, it is vital for other nations to join our efforts if we are to succeed. Our recommendations to Congress in this Report provide our assessment of particular tools the United States can use to exercise its leverage.

#### **KEY FINDINGS AND RECOMMENDATIONS**

The Report presents its key findings, analysis, and recommendations to Congress in nine chapters, organized in three sections capturing the major themes of our Congressional mandate. While our analysis has been divided in this manner, all of these areas interrelate in assessing the broader question of how the U.S.-China economic relationship affects U.S. economic and national security interests. We recognize that the United States’ vast economic trans-

fers to China are inseparable from the larger geopolitical and military developments at issue.

We include within this Executive Summary our priority recommendations to Congress. A full list of the Report's recommendations, by chapter, follows in a separate section.

### **U.S.-China Trade and Economic Transfers**

Bilateral trade and investment flows between the United States and China are taking place on a massive and rapidly increasing scale. Assessing how these flows are affecting the U.S. economy—and with that U.S. economic security—is an essential area of the Commission's work.

#### ***Litmus Test for Global Trade Relations***

The development of the U.S.-China economic relationship has broader implications for the path of globalization writ large. As generally understood, globalization refers to the process of creating a unified global economy through the breaking down of barriers between national economies. It encompasses the increased integration of national goods, financial, and labor markets. In goods markets, globalization takes the form of increased goods and services trade between countries and the internationalization of production through global supply chains. In labor markets, it manifests itself through increased labor migration and movement of production to labor markets that are the most cost-effective in terms of wages and working conditions, whether or not they are the result of artificial conditions. In financial markets, it shows up in the international diversification of investor portfolios and increases in cross-border financial flows.

*The Commission believes that the U.S.-China economic relationship is of such large dimensions that the future trends of globalization will be influenced to a substantial degree by how the United States manages its economic relations with China. It is reasonable to believe that U.S.-China economic relations will help shape the rules of the road for broader global trade relations. If current failings are remedied and the relationship is developed so as to provide broad-based benefits for both sides, globalization will likely be affected in a positive manner on a worldwide scale. If not, the opposite will likely be true.*

Further, the Commission recognizes that many of the challenges facing the U.S. economy from globalization require changes in U.S. policy that go well beyond specific responses to China's practices. Improving U.S. economic competitiveness and the welfare of U.S. workers will require actions including enhanced national commitments to education, infrastructure modernization, changes in U.S. tax policy to encourage U.S.-based production and research and development (R&D), and to more comprehensive retraining programs for U.S. workers negatively impacted by trade. However, given our mandate, we have focused our recommendations to Congress on items tailored to meet the more specific economic challenges of China.

***The Imbalanced U.S.-China Trade Relationship and the Consequences for the U.S. Economy***

The dominant feature of U.S.-China economic relations is the U.S. goods trade deficit, which rose by more than twenty percent in 2003 to a record \$124 billion. This deficit now constitutes over twenty-three percent of the total U.S. goods trade deficit, and China is by far the largest country component of the deficit. Moreover, U.S. trade with China—with \$28 billion in exports to China as compared with \$152 billion in imports in 2003—is by far the United States' most lopsided trade relationship as measured by the ratio of imports to exports. China is heavily dependent on the U.S. market, with exports to the United States constituting 35 percent of total Chinese exports in 2003.

A key factor contributing to the U.S. deficit with China is the undervaluation of the Chinese yuan against the U.S. dollar. This gives Chinese manufacturers a competitive advantage over U.S. manufacturers. Economic fundamentals suggest that the Chinese yuan is undervalued, with a growing consensus of economists estimating the level of undervaluation to be anywhere from fifteen to forty percent. The Chinese government persistently intervenes in the foreign exchange market to keep its exchange rate pegged at 8.28 yuan per dollar, and through these actions appears to be manipulating its currency valuation. A second factor contributing to imbalances in U.S.-China trade is China's mercantilist industrial and foreign direct investment policies. These policies involve a wide range of measures including technology transfer requirements, government subsidies, discriminatory tax relief, and limitations on market access for foreign companies. Finally, China's labor markets do not provide adequate recognition of workers' rights, thereby resulting in artificially low wages that disadvantage our economic interests.

*The U.S. trade deficit with China is of major concern because (i) it has contributed to the erosion of manufacturing jobs and jobless recovery in the United States, (ii) manufacturing is critical for the nation's economic and national security, and (iii) the deficit has adversely impacted other sectors of the U.S. economy as well. Therefore, our trade and investment relationship with China—with current trends continuing and the deficit expanding—is not just a trade issue for the United States, but a matter of our long-term economic health and national security.*

***Recommendation:*** In the absence of concrete progress by the administration in moving China toward an substantial upward revaluation of the yuan against the dollar and to repegging the yuan to a trade-weighted basket of currencies, Congress should pursue legislative measures that will direct the administration to take action—through the WTO or otherwise—to combat China's exchange rate practices. The administration should concurrently encourage our trading partners with similar interests to join in this effort.

***Recommendation:*** Congress should direct the United States Trade Representative (USTR) and the Department of Commerce to undertake immediately a comprehensive investigation of China's system of government subsidies for manufacturing, including

tax incentives, preferential access to credit and capital from state-owned financial institutions, subsidized utilities, and investment conditions requiring technology transfers. The investigation should also examine discriminatory consumption credits that shift demand toward Chinese goods, Chinese state-owned banks' practice of noncommercial-based policy lending to state-owned and other enterprises, and China's dual pricing system for coal and other energy sources. USTR and Commerce should provide the results of this investigation in a report to Congress that assesses whether any of these practices may be actionable subsidies under the WTO and lays out specific steps the U.S. government can take to address these practices.

### ***China's Mixed Record in the WTO***

China joined the WTO in December 2001. Its accession agreement is extremely complex, reflecting the need for special arrangements to address the fact that China does not have a market-based economy. To protect against trade distortions and unfair trade practices resulting from China's non-market status, the agreement includes a special WTO review mechanism—the Transitional Review Mechanism (TRM)—to monitor China's compliance and special safeguard provisions giving WTO members the right to protect themselves against sudden surges of Chinese imports.

*Though China has made progress in reducing tariffs and otherwise formally meeting a large number of its WTO accession commitments, significant compliance shortfalls persist in a number of key areas for U.S. trade. Among areas of concern are China's manipulation of its currency, continued provision of direct and indirect subsidies to Chinese producers, use of unjustified technical and safety standards to exclude foreign products, poor enforcement of intellectual property rights (IPR), and discriminatory tax treatment for domestic semiconductor production. Moreover, China has deliberately frustrated the effectiveness and debased the value of the WTO's TRM, which was intended to be a robust mechanism for assessing China's WTO compliance and for placing multilateral pressure on China to address compliance shortfalls.*

***Recommendation:*** Congress should press the administration to make more use of the WTO dispute settlement mechanism and/or U.S. trade laws to redress unfair Chinese trade practices. In particular, the administration should act promptly to address China's exchange rate manipulation, denial of trading and distribution rights, lack of IPR protection, objectionable labor standards, and subsidies to export industries. On IPR, the United States must take action to force China to enact credible criminal penalties for IPR violations and to greatly enhance enforcement. Another key priority for U.S. trade officials must be ensuring China's compliance with its WTO commitments to refrain from forced technology transfers used as a condition of doing business. In pursuing these cases, Congress should encourage USTR to consult with trading partners who have mutual interests at the outset of each new trade dispute with China.

***Recommendation:*** Congress should press the administration to make better use of the China-specific section 421 and textile

safeguards negotiated as part of China's WTO accession agreement to give relief to U.S. industries especially hard hit by surges in imports from China.

**Recommendation:** Congress should encourage USTR and other appropriate U.S. government officials to take action to ensure that the WTO's Transitional Review Mechanism process is a meaningful multilateral review that measures China's compliance with its WTO commitments. If China continues to frustrate the TRM process, the U.S. government should work with the European Union, Japan, and other major trading partners to produce a separate, unified annual report that measures and reports on China's progress toward compliance and coordinates a plan of action to address shortcomings.

***Governance and Security Concerns with China's Outreach to the Global Capital Markets***

The Chinese government has selectively chosen firms—predominately state-owned enterprises (SOEs)—to list on international capital markets, primarily in Hong Kong and New York, and may bring as much as \$23 billion in initial public offerings to global capital markets in 2004, a marked increase over the past few years. Yet, Chinese corporate governance standards lag far behind those in the United States. Accounting and reporting standards are weak, and China lacks a sound, transparent system of credit ratings. As a result, even the most sophisticated investors lack adequate disclosure when it comes to Chinese debt and equity listings in international capital markets.

Moreover, inadequate transparency and disclosure prevents the U.S. government and investors from understanding the possible nexus between Chinese firms listing on U.S. and international capital markets and weapons proliferation and/or China's defense-industrial complex. Many SOEs were previously controlled by the People's Liberation Army (PLA), and there is concern that unofficial links to the PLA remain intact after privatization. At least one firm listed in China's capital markets and available for purchase by qualified U.S. investors—China North Industries Corp.—has been sanctioned for proliferation by the U.S. government, and there are concerns that other Chinese firms listed or trading in China or in the United States may be engaging in similar activities.

*Without adequate information about Chinese firms trading in international capital markets, U.S. investors may be unwittingly pouring money into black box firms lacking basic corporate governance structures, as well as enterprises involved in activities harmful to U.S. security interests.*

**Recommendation:** Congress should reinstate the reporting provision of the 2003 Intelligence Authorization Act [P.L. 107-306, Sec. 827] directing the director of central intelligence (DCI) to prepare an annual report identifying Chinese or other foreign companies determined to be engaged or involved in the proliferation of weapons of mass destruction or their delivery systems that have raised, or attempted to raise, funds in the U.S. capital markets. In addition, Congress should expand this provision to require the DCI to include a broader interagency review of the

security-related concerns of Chinese firms accessing, or seeking to access, the U.S. capital markets that would examine linkages between proliferation and other security-related concerns and Chinese companies, including their parents and subsidiaries, with a presence in the U.S. capital markets.

**Recommendation:** Congress should bar U.S. institutional or private investors from making debt or equity investments, directly or indirectly, in firms identified and sanctioned by the U.S. government for weapons proliferation-related activities, whether they are listed and traded in the United States or in the Chinese or other international capital markets.

We note that these bilateral trade and investment dynamics are occurring at a time of significant economic stresses in China, with growing numbers of economists and financial analysts cautioning about the possible bursting of the bubble in China's economy. These predictions rest on concerns about the economy overheating and on concerns about the weak foundation of the Chinese banking system, which has accumulated nonperforming loans estimated to be \$500 billion after decades of making loan decisions based on policy or political grounds rather than financial considerations.

*These suspect capital allocation practices raise cautionary flags about the sustainability of China's economic boom. It is crucial that U.S. policymakers understand the potential ramifications for the U.S. economy and investors, China's Asian trading partners, and China's domestic stability should China's economic bubble burst.*

### **Regional and Geostrategic Developments**

The Commission examined China's rise as a regional power and its central role in the global security challenges stemming from the proliferation of weapons of mass destruction (WMD) and access to energy supplies. In this examination, we weighed the extent to which China is contributing to or undermining a more stable global security environment.

#### ***China's Regional Diplomatic Offensive***

Through trade and investment, China has become increasingly interconnected with its Asian neighbors. Investors from Hong Kong, Taiwan, Japan, South Korea and Southeast Asia are helping to fuel the export processing industries of China that deliver a wide array of manufactured goods to the United States and Europe through global supply chains. China's industrial growth has attracted foreign direct investment that might otherwise have gone elsewhere; some industries in Northeast and Southeast Asia have been displaced by competition from China; but Asian suppliers also have been increasingly feeding China's export processing industries and domestic markets. Large trade surpluses with China in 2002–03 contributed to the growth of most regional economies.

Enhanced regional economic linkages have served China's political agenda. Through increasingly active and sophisticated bilateral and multilateral diplomacy, China is presenting itself as a country that is peacefully rising, offering win-win solutions for its economic partners in Asia. It has shown a greater willingness in recent years to participate actively in multilateral forums on both economic and

security issues—such as APEC, the ASEAN Regional Forum, and the Shanghai Cooperation Organization. Evidence indicates that this diplomatic strategy is making inroads for China, despite a wariness of China's growing military power, particularly on the part of Japan.

*While China has undertaken a diplomatic offensive in Asia to reassure its neighbors of its long-term peaceful intentions, buying time and space in the process to pursue its economic development and military strengthening, countries in the region appear to perceive the United States as losing focus on Asia as it prosecutes the war on terrorism. The Commission believes that the United States' influence and vital long-term interests in Asia are being challenged by China's robust regional economic engagement and diplomacy, and that greater attention must be paid to U.S. relations in the region.*

**Recommendation:** Congress should revitalize U.S. engagement with China's Asian neighbors by encouraging U.S. diplomatic efforts to identify and pursue initiatives to demonstrate the United States' firm commitment to facilitating the economic and security needs of the region. These initiatives should have a regional focus and complement bilateral efforts. The Asia-Pacific Economic Cooperation forum (APEC) offers a ready mechanism for pursuit of such initiatives.

### ***Growing Tensions Across the Strait and in Hong Kong***

China has not offered win-win political solutions to Taiwan and Hong Kong. China has been building missile forces and positioning its military to deter Taiwan from taking political steps Beijing considers unacceptable moves towards independence and to coerce Taiwan to end the island's continued separate status. Further, China is using its political clout to keep Taiwan out of regional and bilateral economic arrangements and to otherwise economically marginalize the island. Taiwan President Chen Shui-bian's recent reelection and Chen's plan for constitutional revision have heightened China's anxiety regarding Taiwan and heightened the near-term prospects for conflict. In Hong Kong, China's National People's Congress has undercut Hong Kong's autonomy and self-governance by its recent unilateral decisions to rule out near-term direct elections for Hong Kong's chief executive and Legislative Council. Moreover, Beijing has engaged in a systemic campaign in recent weeks to intimidate the democracy movement in Hong Kong by depicting its leaders as unpatriotic toward China, directing an unprecedented visit of eight Chinese warships to Hong Kong's harbor, and prohibiting legislative debate on electoral matters in Hong Kong's legislature.

*China's recent actions toward Taiwan and Hong Kong call into question its commitments to a peaceful approach toward Taiwan and to preserving Hong Kong's autonomy and self-government. These developments merit a fresh look at U.S. policies in these areas by the Congress and executive branch. In particular, recent developments across the Strait are putting increasing stress on the United States' one China policy, demonstrating the need for a new assessment of this policy that takes into consideration current realities.*

**Recommendation:** Congress should consult with the administration to assess jointly whether the PRC's recent interventions impacting Hong Kong's autonomy constitute grounds for invoking the terms of the U.S.-Hong Kong Policy Act with regard to Hong Kong's separate treatment. This includes U.S. bilateral relations with Hong Kong in areas such as air services, customs treatment, immigration quotas, visa issuance, and export controls. In this context, Congress should assess the implications of the National People's Congress Standing Committee's intrusive interventions with regard to matters of universal suffrage and direct elections. Congress and the administration should continue to keep Hong Kong issues on the U.S.-PRC bilateral agenda and work closely with the United Kingdom on Hong Kong issues.

**Recommendation:** Congress should enhance its oversight role in the implementation of the Taiwan Relations Act. Executive branch officials should be invited to consult on intentions and report on actions taken to implement the TRA through the regular committee hearing process of the Congress, thereby allowing for appropriate public debate on these important matters. In this same context, Congress and the administration should conduct a fresh assessment of the one China policy, given the changing realities in China and Taiwan. This should include a review of:

- The policy's successes, failures, and continued viability;
- Whether changes may be needed in the way the United States government coordinates its defense assistance to Taiwan, including the need for an enhanced operating relationship between U.S. and Taiwan defense officials and the establishment of a U.S.-Taiwan hotline for dealing with crisis situations.
- How U.S. policy can better support Taiwan's breaking out of the international economic isolation that the PRC seeks to impose on it and whether this issue should be higher on the agenda in U.S.-China relations. Economic and trade policy measures that could help ameliorate Taiwan's marginalization in the Asian regional economy should also be reviewed. These could include enhanced U.S.-Taiwan bilateral trade arrangements that would include protections for labor rights, the environment, and other important U.S. interests.

**Recommendation:** Congress should consult with the administration on developing appropriate ways for the United States to facilitate actively cross-Strait dialogue that could promote the long-term, peaceful resolution of differences between the two sides and could lead to direct trade and transport links and/or other cross-Strait confidence-building measures. The administration should be directed to report to Congress on the status of cross-Strait dialogue, the current obstacles to such dialogue, and, if appropriate, efforts that the United States could undertake to promote such a dialogue.

### ***China's Intermediary Role in the Standoff with North Korea***

China has become a major diplomatic player in the ongoing standoff with North Korea over Pyongyang's development of nuclear weapons. As host of the Six Party Talks, China has helped bring North Korea to the table; but has not adequately employed

its considerable political and economic leverage over North Korea to drive Pyongyang towards acceptance of the goal of achieving a complete, verifiable, and irreversible dismantlement of North Korea's nuclear weapons programs. Even as events in North Korea unfold, Chinese state companies continue to pursue deals to sell WMD-related items to countries of concern to the United States. The United States has repeatedly imposed sanctions in response to these activities; but sanctions remain limited to penalizing offending companies, despite many of these companies' direct affiliation with top levels of the PRC government or military.

*The United States has placed great faith in China's ability to move North Korea toward renouncing its nuclear weapons programs. The U.S.-China working relationship to defuse this crisis has been lauded as an essential component in bilateral relations, one that appears to trump other areas of U.S. concern. The Commission believes China has not effectively utilized its substantial leverage over North Korea to produce a workable resolution and regards China's performance in this regard over the next few months as a key test of the U.S.-China relationship.*

**Recommendation:** Should the current stalemate in the Six Party Talks continue, Congress should press the administration to work with its regional partners, intensify its diplomacy, and ascertain North Korean and Chinese intentions with a detailed and staged proposal beginning with a freeze of all North Korea's nuclear weapons programs, followed by a verifiable and irreversible dismantlement of those programs. Further work in this respect needs to be done to determine whether a true consensus on goals and process can be achieved with China. If this fails, the United States must confer with its regional partners to develop new options to resolve expeditiously the standoff with North Korea, particularly in light of public assessments that the likely Korean uranium enrichment program might reach a stage of producing weapons by 2007.

**Recommendation:** Congress should press the administration to renew efforts to secure China's agreement to curtail North Korea's commercial export of ballistic missiles and to encourage China to provide alternative economic incentives for the North Koreans to substitute for the foreign exchange that would be foregone as a result of that curtailment.

### ***China's Energy Trajectory and the Implications for Global Energy Markets***

China has moved past Japan to rank second behind the United States in global energy consumption, and is the world's second largest oil consumer and its third largest oil importer. These trends have made China increasingly dependent on imported energy sources. China has pursued its energy security strategy via bilateral energy deals, and does not maintain a meaningful strategic petroleum reserve or participate in multilateral energy market stabilizing arrangements. China's rising energy demand has put added pressure on global petroleum supplies and prices. Indeed, the recent escalation in gasoline prices in the United States has been attributed, in part, to the impact of China's growing pressure on

world oil supplies and the absence of any mechanism in place to counter this pressure and maintain stable prices for consumers. It also has had consequences for China's economy, as energy shortages and blackouts have led to slowdowns in industrial production in certain sectors.

Energy needs have driven China closer to the Middle East and Africa, as well as neighbors in Central Asia, Russia and the Pacific. China seeks to lock in secure energy supplies, especially new sources of gas and oil not subject to potential disruption in a time of conflict. China has sought energy cooperation with countries of concern to the United States, including Iran and Sudan, which are inaccessible by U.S. and other western firms. Some analysts have voiced suspicions that China may have offered WMD-related transfers as a component of some of its energy deals.

*China's growing energy needs, linked to its rapidly expanding economy, are creating economic and security concerns for the United States. China's energy security policies are driving it into bilateral arrangements that undermine multilateral efforts to stabilize oil supplies and prices, and in some cases may involve dangerous weapons transfers.*

**Recommendation:** Congress should direct the secretaries of State and Energy to consult with the International Energy Agency with the objective of upgrading the current loose experience-sharing arrangement, whereby China engages in some limited exchanges with the organization, to a more structured arrangement whereby the PRC would be obligated to develop a meaningful strategic reserve, and coordinate release of stocks in supply disruption crises or speculator-driven price spikes.

### **Technology and Military Advancements**

China has undergone rapid advancements in technology development, military modernization, and media control. These advancements are altering bilateral and regional trade flows, the cross-Strait military balance, and the Chinese government's ability to control the media and shape perceptions of the United States and its policies.

#### ***China's Coordinated National Strategy for Technology Development***

The Chinese government has developed and pursued a coordinated strategy for attracting and directing national and foreign investment into high-tech research, development, and production. This strategy for high-tech investment has been a sustained, multi-year effort that has paid dividends for economic growth, science and technology institutions, educational infrastructure, technical levels of workers and industries, and military modernization. The United States and other foreign partners—both commercial and governmental—have contributed significantly to these developments. U.S. advanced technology and technological expertise is transferred to China in a number of ways, both legal and illegal, including through U.S. invested firms and research centers in China, Chinese investments in the United States, bilateral science and technology (S&T) cooperative programs, and Chinese students

and researchers who return home following their work and study at U.S. universities and research institutes.

*China's development as a locus of high-technology manufacturing and R&D has been a key component of its economic reform strategy, and the pace of this development has exceeded many outside observers' expectations. What China does with its growing technology capabilities—whether it converts them to military uses and/or to control the free flow of information to its population—is of direct national security concern to the United States. Moreover, the extent to which these advances allow China to challenge U.S. competitiveness in technology development is a vital matter for U.S. economic security.*

The U.S. government collects inadequate data on the shifts of U.S. high-tech investment, technology transfers, and R&D to China. Information on U.S. transfers of technology subject to export licensing is compiled and government reporting on official S&T cooperation efforts has improved somewhat under Congressional mandate; but the overall picture of U.S. contributions to the development of China's technology growth and R&D base is not at all clear. Assessments of the implications of these shifts for the United States' long-term technological superiority and for China's competitiveness—both commercially and militarily—are difficult to make as a result of this gap in knowledge. Moreover, the process by which the U.S. government reviews acquisitions of American companies by Chinese and other foreign investors—the Committee on Foreign Investment in the United States (CFIUS)—focuses solely on traditional national security concerns with such investments, while failing to consider broader U.S. economic security interests.

***Recommendation:*** Congress should direct the administration to develop and publish a coordinated, comprehensive national policy and strategy designed to meet China's challenge to the maintenance of our scientific and technological leadership and competitiveness in the same way it is presently required to develop and publish a national security strategy.

***Recommendation:*** Congress should revise the law governing the CFIUS process to expand the definition of national security to include the potential impact on national economic security as a criterion to be reviewed, and should direct the administration to transfer chairmanship of CFIUS from the Secretary of the Treasury to the Secretary of Commerce.

### ***Military Modernization and the Shift in the Cross-Strait Military Balance***

Commission research and hearings indicate that China's military capabilities increasingly appear to be shaped to fit a Taiwan conflict scenario and to target U.S. air and naval forces that could become involved. China's modern arsenal includes an increasingly sophisticated nuclear missile force that is of direct strategic concern to the United States, while in the Western Pacific theater China has deployed over five hundred conventional short-range ballistic missiles that threaten Taiwan and longer-range conventional missiles that could threaten Japan and U.S. forces deployed in the region. China's advanced naval and air weapons systems—including

surface ships, submarines, anti-ship missiles, and advanced fighter aircraft—have been significantly enhanced by infusions of foreign military technology, co-production assistance and direct purchases, mainly from Russia and, to a lesser extent, from Israel.

*China's quantitative and qualitative military advancements have resulted in a dramatic shift in the cross-Strait military balance toward China, with serious implications for Taiwan, for the United States, and for cross-Strait relations.*

**Recommendation:** Congress should urge the President and the secretaries of State and Defense to press strongly their European Union counterparts to maintain the EU arms embargo on China.

**Recommendation:** Congress should direct the administration to restrict foreign defense contractors who sell sensitive military-use technology or weapons systems to China from participating in U.S. defense-related cooperative research, development, and production programs, which restriction can be targeted to cover only those technology areas involved in the transfer to China, and to provide a comprehensive annual report to the appropriate committees of Congress on the nature and scope of foreign military sales to China, particularly from Russia and Israel.

### ***Continued Controls Over The Media***

The Chinese government continues to exercise strong controls on the dissemination of information via the public media. While there has been some loosening of controls on reporting of news relating to many areas of business and society in China, red lines remain that are dangerous for individuals or organizations to exceed.

The Chinese government's propaganda machinery has not withered away during twenty-five years of reform and opening; rather it has modernized. This was proven beyond doubt during the SARS epidemic of 2003. The Chinese government's intensive efforts to cover up the outbreak of SARS showed the breadth of the government's control, while the ability of many in the population to nonetheless access information about the epidemic via the Internet, text messaging, and other new media demonstrated the limitations of this control in a growing high-tech society.

Government censorship; jamming of some overseas broadcasts, including those of U.S. government-sponsored outlets like the Voice of America; blocking of foreign and domestic Internet Web sites; and punishments for those who disseminate information beyond the government's tolerance remain widespread. Open criticism of China's leaders, questioning of the Communist Party and its policies, organizational activities that are independent of government control, and anything perceived as conducive to political conduct remains taboo in the public media. The Chinese government has used its control over the media to shape the population's perceptions of the United States and its policies, leading to a consistent message in the Chinese media that has been particularly critical of U.S. foreign policy and intentions in Asia.

*Despite the Chinese government's much heralded reversal of policy to encourage more open and accurate reporting of SARS during last year's outbreak, there has in practice been no fundamental change in the Chinese government's approach to controlling the*

*media, including information available through the Internet. This control shapes the Chinese population's perceptions of the United States and its policies, enhancing the risk of misperception and miscalculation in the bilateral relationship and increasing the potential for, and the difficulty of, managing crisis situations.*

**Recommendation:** Congress should enhance funding for the Broadcasting Board of Governors' programs aimed at circumventing China's Internet firewall through the development of anticensorship technologies and methods, and direct the Department of Commerce and other relevant agencies to conduct a review of export administration regulations to determine whether restrictions are needed on the export of U.S. equipment, software, and technologies that permit the Chinese government to surveil its own people or censor free speech.

### CONCLUSION

It is now commonplace to assert that the U.S.-China relationship will be our most significant bilateral relationship during the Twenty-First Century. Our trade and investment with China already has an enormous impact on the U.S. economy, and the security challenges before us are of the highest order. Through an appropriate mix of U.S. policies, this complex relationship can be managed in such a way as to minimize the downside risks, and enhance the prospects of moving China toward a more open, democratic and market-oriented society, to the benefit of both our economic and national security interests.

As we stated at the outset, we have concluded that a number of the current trends in U.S.-China relations are presently moving in the wrong direction. With a renewed and realistic focus on the relationship by the Congress, we are optimistic that U.S. policy toward China can be put on a more solid, productive footing to tackle the long-term challenges that lie ahead.

## **RECOMMENDATIONS TO CONGRESS**

### **CHAPTER 1—CHINA’S INDUSTRIAL, INVESTMENT, AND EXCHANGE RATE POLICIES**

#### **Recommendations for Dealing with China’s Currency Manipulation**

- The 1988 Omnibus Trade and Competitiveness Act requires the Treasury Department to examine whether countries are manipulating their exchange rates for purposes of gaining international competitive advantage. The Treasury is to arrive at its finding in consultation with the IMF, which defines manipulation as “protracted large-scale intervention in one direction in the exchange market.” The Treasury has repeatedly evaded reporting on this test. The Commission recommends that Congress require the Treasury to explicitly address this test in its required report to Congress. Furthermore, a condition for taking action against a country that manipulates its currency is that an offending country be running a material global current account surplus in addition to a bilateral surplus. The Commission recommends that Congress amend this provision so that a material global current account surplus is not a required condition.
- The administration should use all appropriate and available tools at its disposal to address and correct the problem of currency manipulation by China and other East Asian countries. With regard to China, this means bringing about a substantial upward revaluation of the yuan against the dollar. Thereafter, the yuan should be pegged to a trade-weighted basket of currencies, and provisions should be established to guide future adjustments if needed. As part of this process, the Treasury Department should engage in meaningful bilateral negotiation with the Chinese government, and it should also engage in meaningful bilateral negotiations with Japan, Taiwan, and South Korea regarding ending their long-standing exchange rate manipulation. The administration should concurrently encourage our trading partners with similar interests to join in this effort. The Commission recommends that Congress pursue legislative measures that direct the administration to take action—through the WTO or otherwise—to combat China’s exchange rate practices in the event that no concrete progress is forthcoming.

#### **Recommendations for Addressing China’s Mercantilist Industrial and FDI Policies**

- The Commission recommends that Congress direct the United States Trade Representative (USTR) and the Department of Commerce to undertake immediately a comprehensive investigation of China’s system of government subsidies for manufacturing, including tax incentives, preferential access to credit and

capital from state-owned financial institutions, subsidized utilities, and investment conditions requiring technology transfers. The investigation should also examine discriminatory consumption credits that shift demand toward Chinese goods, Chinese state-owned banks' practice of noncommercial-based policy lending to state-owned and other enterprises, and China's dual pricing system for coal and other energy sources. USTR and Commerce should provide the results of this investigation in a report to Congress that assesses whether any of these practices may be actionable subsidies under the WTO and lays out specific steps the U.S. government can take to address these practices.

- The Commission recommends that Congress direct the administration to undertake a comprehensive review and reformation of the government's trade enforcement infrastructure in light of the limited efforts that have been directed at enforcing our trade laws. Such a review should include consideration of a proposal by Senator Ernest Hollings (D-SC) to establish an assistant attorney general for international trade enforcement in the Department of Justice to enhance our capacity to enforce our trade laws. Moreover, the U.S. government needs to place an emphasis on enforcement of international labor standards and appropriate environmental standards.
- The Commission recommends that Congress direct the administration to work with other interested WTO members to convene an emergency session of the WTO governing body to extend the MFA at least through 2008 to provide additional time for impacted industries to adjust to surges in imports from China.

#### **CHAPTER 2—CHINA IN THE WORLD TRADE ORGANIZATION: COMPLIANCE, MONITORING, AND ENFORCEMENT**

- The Commission recommends that Congress press the administration to make more use of the WTO dispute settlement mechanism and/or U.S. trade laws to redress unfair Chinese trade practices. In particular, the administration should act promptly to address China's exchange rate manipulation, denial of trading and distribution rights, lack of IPR protection, objectionable labor standards, and subsidies to export industries. In pursuing these cases, Congress should encourage USTR to consult with trading partners who have mutual interests at the outset of each new trade dispute with China.
- The Commission recommends that Congress press the administration to make better use of the China-specific section 421 and textile safeguards negotiated as part of China's WTO accession agreement to give relief to U.S. industries especially hard hit by surges in imports from China.
- Notwithstanding China's commitments at the April 2004 JCCT meeting, the Commission recommends that Congress press the administration to file a WTO dispute on the matter of China's failure to protect intellectual property rights. China's WTO obligation to protect intellectual property rights demands not only that China promulgate appropriate legislation and regulations, including enacting credible criminal penalties, but also that these rules be enforced. China has repeatedly promised, over many years, to take significant action. Follow-through and action have

been limited and, therefore, the Commission believes that immediate U.S. action is warranted.

- The Commission recommends that Congress urge the Department of Commerce to make countervailing duty laws applicable to nonmarket economies. If Commerce does not do so, Congress should pass legislation to achieve the same effect. U.S. policy currently prevents application of countervailing duty laws to non-market economy countries such as China. This limits the ability of the United States to combat China's extensive use of subsidies that give Chinese companies an unfair competitive advantage.
- The Commission recommends that Congress encourage the administration to make a priority of obtaining and ensuring China's compliance with its WTO commitments to refrain from forced technology transfers that are used as a condition of doing business. The transfer of technology by U.S. investors in China as a direct or indirect government-imposed condition of doing business with Chinese partners remains an enduring U.S. security concern as well as a violation of China's WTO agreement. A WTO complaint should be filed when instances occur.
- The Commission recommends that Congress encourage USTR and other appropriate U.S. government officials to take action to ensure that the WTO's Transitional Review Mechanism process is a meaningful multilateral review that measures China's compliance with its WTO commitments. If China continues to frustrate the TRM process, the U.S. government should initiate a parallel process that includes a specific and comprehensive measurement system. The United States should work with the European Union, Japan, and other major trading partners to produce a separate, unified annual report that measures and reports on China's progress toward compliance and coordinates a plan of action to address shortcomings. This report should be provided to Congress. In addition, independent assessments of China's WTO compliance conducted by the U.S. government, such as USTR's annual report, should be used as inputs in the multilateral forum evaluating China's compliance, whether that forum is a reinvigorated and effective TRM or a new process.
- The Commission recommends that Congress consider options to assist small- and medium-sized business in pursuing trade remedies under U.S. law, such as through section 421 cases.

### **CHAPTER 3—CHINA'S PRESENCE IN THE GLOBAL CAPITAL MARKETS**

- The Commission recommends that Congress reinstate the reporting provision of the 2003 Intelligence Authorization Act [P.L. 107–306, Sec. 827] directing the director of central intelligence (DCI) to prepare an annual report identifying Chinese or other foreign companies determined to be engaged or involved in the proliferation of weapons of mass destruction or their delivery systems that have raised, or attempted to raise, funds in the U.S. capital markets. The Commission further recommends that Congress expand this provision to require the DCI to undertake a broader review of the security-related concerns of Chinese firms accessing, or seeking to access, the U.S. capital markets. This should include the establishment of a new interagency process of

consultations and coordination among the National Security Council, the Treasury Department, the State Department, the SEC, the Federal Bureau of Investigation (FBI), and the intelligence community regarding Chinese companies listing or seeking to list in the U.S. capital markets. The aim of such an inter-agency process should be to improve collection management and assign a higher priority to assessing any linkages between proliferation and other security-related concerns and Chinese companies, including their parents and subsidiaries, with a presence in the U.S. capital markets.

- The Commission recommends that Congress require mutual funds to more fully disclose the specific risks of investments in China. This should include disclosure to investors of the identities of any local firms subcontracted by funds to perform due diligence on Chinese firms held in their portfolios. Subcontractors' principal researchers, location, experience, and potential conflicts of interest should all be disclosed.
- The Commission recommends that Congress direct the Commerce Department and USTR to evaluate whether Chinese state-owned banks' practice of noncommercial-based policy lending to state-owned and other enterprises constitutes an actionable WTO-inconsistent government subsidy and include this evaluation in the report on subsidies recommended in Chapter 1.
- In its 2002 Report, the Commission recommended that Congress prohibit debt or equity offerings in U.S. capital markets by any Chinese or foreign entity upon which the State Department has imposed sanctions for engaging in the proliferation of weapons of mass destruction (WMD) or ballistic missile delivery systems. The Commission further believes that Congress should bar U.S. institutional or private investors from making debt or equity investments, directly or indirectly, in firms identified and sanctioned by the U.S. government for weapons proliferation-related activities, whether they are listed and traded in the United States or in the Chinese or other international capital markets. For example, NORINCO, a company sanctioned by the U.S. government, is currently available for purchase on the Chinese A share market. U.S.-based qualified foreign institutional investors that have rights to trade on this exchange should not be permitted to invest in NORINCO or any other firm officially determined to have engaged in the proliferation of WMD or ballistic missiles.

#### **CHAPTER 4—CHINA'S REGIONAL ECONOMIC AND SECURITY IMPACTS AND THE CHALLENGES OF HONG KONG AND TAIWAN**

##### **Regional Engagement**

- The Commission recommends that Congress revitalize U.S. engagement with China's Asian neighbors by encouraging U.S. diplomatic efforts to identify and pursue initiatives to demonstrate the United States' firm commitment to facilitating the economic and security needs of the region. These initiatives should have a regional focus and complement bilateral efforts. The Asia-Pacific Economic Cooperation forum (APEC) offers a ready mechanism for pursuit of such initiatives. The United States should consider

further avenues of cooperation by associating with regional forums of which it is not a member.

### **Hong Kong**

- The Commission recommends that Congress consult with the administration to assess jointly whether the PRC's recent interventions impacting Hong Kong's autonomy constitute grounds for invoking the terms of the U.S.-Hong Kong Policy Act with regard to Hong Kong's separate treatment. This includes U.S. bilateral relations with Hong Kong in areas such as air services, customs treatment, immigration quotas, visa issuance, and export controls. In this context, Congress should assess the implications of the National People's Congress Standing Committee's intrusive interventions with regard to matters of universal suffrage and direct elections. Congress and the administration should continue to keep Hong Kong issues on the U.S.-PRC bilateral agenda and work closely with the United Kingdom on Hong Kong issues.

### **Cross-Strait Issues**

- The Commission recommends that Congress enhance its oversight role in the implementation of the Taiwan Relations Act. Executive branch officials should be invited to consult on intentions and report on actions taken to implement the TRA through the regular committee hearing process of the Congress, thereby allowing for appropriate public debate on these important matters. This should include, at a minimum, an annual report on Taiwan's request for any military equipment and technology and a review of U.S.-Taiwan policy in light of the growing importance of this issue in U.S.-China relations.
- The Commission recommends that the Congress and the administration conduct a fresh assessment of the one China policy, given the changing realities in China and Taiwan. This should include a review of:
  - The policy's successes, failures, and continued viability;
  - Whether changes may be needed in the way the U.S. government coordinates its defense assistance to Taiwan, including the need for an enhanced operating relationship between U.S. and Taiwan defense officials and the establishment of a U.S.-Taiwan hotline for dealing with crisis situations;
  - How U.S. policy can better support Taiwan's breaking out of the international economic isolation that the PRC seeks to impose on it and whether this issue should be higher on the agenda in U.S.-China relations. Economic and trade policy measures that could help ameliorate Taiwan's marginalization in the Asian regional economy should also be reviewed. These should include enhanced U.S.-Taiwan bilateral trade arrangements that would include protections for labor rights, the environment, and other important U.S. interests.
- To support this policy review, the Commission recommends that the appropriate committees of Congress request that the executive branch make available to them a comprehensive catalogue and copies of all the principal formal understandings and other communications between the United States and both China and

Taiwan as well as other key historical documents clarifying U.S. policy toward Taiwan.

- The Commission recommends that Congress consult with the administration on developing appropriate ways for the United States to facilitate actively cross-Strait dialogue that could promote the long-term, peaceful resolution of differences between the two sides and could lead to direct trade and transport links and/or other cross-Strait confidence-building measures. The administration should be directed to report to Congress on the status of cross-Strait dialogue, the current obstacles to such dialogue, and, if appropriate, efforts that the United States could undertake to promote such a dialogue.

#### **CHAPTER 5—CHINA’S PROLIFERATION PRACTICES AND THE CHALLENGE OF NORTH KOREA**

- Should the current stalemate in the Six Party Talks continue, the Commission recommends that Congress press the administration to work with its regional partners, intensify its diplomacy, and ascertain North Korean and Chinese intentions with a detailed and staged proposal beginning with a freeze of all North Korea’s nuclear weapons programs, followed by a verifiable and irreversible dismantlement of those programs. Further work in this respect needs to be done to determine whether a true consensus on goals and process can be achieved with China. If this fails, the United States must confer with its regional partners to develop new options to resolve expeditiously the standoff with North Korea, particularly in light of public assessments that the likely North Korean uranium enrichment program might reach a stage of producing weapons by 2007.
- The Commission recommends that Congress press the administration to renew efforts to secure China’s agreement to curtail North Korea’s commercial export of ballistic missiles and to encourage China to provide alternative economic incentives for the North Koreans to substitute for the foreign exchange that would be forgone as a result of that curtailment.
- As recommended in the Commission’s 2002 Report, and now similarly proposed by President Bush and the U.N. Secretary General, the Commission reiterates that Congress should support U.S. efforts to work with the U.N. Security Council to create a new U.N. framework for monitoring the proliferation of weapons of mass destruction and their delivery systems in conformance with member nations’ obligations under the Nuclear Non-Proliferation Treaty, the Biological Weapons Convention, and the Chemical Weapons Convention. This new monitoring body would be delegated authority to apply sanctions to countries violating these treaties in a timely manner or, alternatively, would be required to report all violations in a timely manner to the Security Council for discussion and sanctions.<sup>1</sup>
- As recommended in the Commission’s 2002 Report, the Commission reiterates that Congress should act to broaden and harmonize proliferation sanctions by amending all current statutes that pertain to proliferation to include a new section authorizing the president to invoke economic sanctions against foreign nations that proliferate WMD and technologies associated with

WMD and their delivery systems. These economic sanctions would include import and export limitations, restrictions on access to U.S. capital markets, restrictions on foreign direct investment into an offending country, restrictions on transfers by the U.S. government of economic resources, and restrictions on science and technology cooperation or transfers. The new authority should require the president to report to Congress the rationale and proposed duration of the sanctions within seventy-two hours of imposing them. Although the president now has the authority to select from the full range of economic and security-related sanctions, these sanctions are case specific and relate to designated activities within a narrow set of options available on a case-by-case basis.<sup>2</sup>

#### **CHAPTER 6—CHINA'S ENERGY NEEDS AND STRATEGIES**

- The Commission recommends that Congress direct the secretaries of State and Energy to consult with the International Energy Agency with the objective of upgrading the current loose experience-sharing arrangement, whereby China engages in some limited exchanges with the organization, to a more structured arrangement whereby the PRC would be obligated to develop a meaningful strategic reserve, and coordinate release of stocks in supply disruption crises or speculator-driven price spikes.<sup>3</sup>
- The Commission recommends that Congress encourage work that increases bilateral cooperation in improving China's energy efficiency and environmental performance, such as further cooperation in Clean Coal Technology and waste-to-liquid-fuels programs, subject to any overriding concerns regarding technology transfers. Further, the Commission recommends that Congress direct the State and Energy departments, and the intelligence community, to conduct an annual review of China's international energy relationships and its energy practices during times of global energy crises to determine whether such U.S. assistance continues to be justified.
- The Commission recommends that the Commerce Department and USTR investigate whether China's dual pricing system for coal and any other energy sources constitutes a prohibited subsidy under the WTO and include this assessment in the Commerce/USTR report on subsidies recommended in Chapter 1.

#### **CHAPTER 7—CHINA'S HIGH-TECHNOLOGY DEVELOPMENT AND U.S.-CHINA SCIENCE AND TECHNOLOGY COOPERATION**

- The U.S. government must develop a coordinated, comprehensive national policy and strategy designed to meet China's challenge to the maintenance of our scientific and technological leadership. America's economic competitiveness, standard of living, and national security are dependent on such leadership. The Commission therefore recommends that Congress charge the administration to develop and publish such a strategy in the same way it is presently required to develop and publish a national security strategy that deals with our military and political challenges around the world. In developing this strategy, the administration should utilize data presently compiled by the Department of

Commerce to track our nation's technological competitiveness in comparison with other countries.

- The Commission recommends that Congress revise the law governing the CFIUS process (Title VII of the Defense Production Act)—which gives the president authority to investigate mergers, acquisitions, or takeovers of U.S. firms by foreign persons if such activities pose a threat to national security—to expand the definition of national security to include the potential impact on national economic security as a criterion to be reviewed. In this regard, the term national economic security should be defined broadly without limitation to particular industries.
- The Commission recommends that Congress direct the administration to transfer chairmanship of CFIUS from the Secretary of the Treasury to the Secretary of Commerce.

#### **CHAPTER 8—CHINA'S MILITARY MODERNIZATION AND THE CROSS-STRAIT BALANCE**

- The annual report to Congress recommended in Chapter 4 on Taiwan's requests for military equipment and technology should include an assessment of the new military systems required by Taiwan to defend against advanced PRC offensive capabilities.
- As recommended in Chapter 4, Congress and the administration should review the need for a direct communications hotline between the United States and Taiwan for dealing with crisis situations. This is important in light of the short time frame of potential military scenarios in the Strait, together with Chinese strategic doctrine emphasizing surprise and deception.
- The Commission recommends that Congress urge the president and the secretaries of State and Defense to press strongly their European Union counterparts to maintain the EU arms embargo on China.
- The Commission recommends that Congress direct the administration to restrict foreign defense contractors who sell sensitive military-use technology or weapons systems to China from participating in U.S. defense-related cooperative research, development, and production programs. This restriction can be targeted to cover only those technology areas involved in the transfer to China.
- The Commission recommends that Congress request the Department of Defense to provide a comprehensive annual report to the appropriate committees of Congress on the nature and scope of foreign military sales to China, particularly from Russia and Israel.

#### **CHAPTER 9—MEDIA AND INFORMATION CONTROL IN CHINA**

- On June 30, 2003, the Commission recommended that Congress direct the Broadcasting Board of Governors to target funds for efforts aimed at circumventing China's Internet firewall through the development of anticensorship technologies and methods. Congress approved such funding as part of the 2004 Omnibus Appropriations Act. The Commission recommends that Congress continue this program with enhanced resources, pending successful results for the current fiscal year.

- As recommended in the Commission's 2002 Report, the Commission reiterates that Congress should direct the Department of Commerce and other relevant agencies to conduct a review of export administration regulations to determine whether specific measures should be put in place to restrict the export of U.S. equipment, software, and technologies that permit the Chinese government to surveil its own people or censor free speech.
- The Commission recommends that Congress approve legislation to establish an Office of Global Internet Freedom within the executive branch, tasked with implementing a comprehensive global strategy to combat state-sponsored blocking of the Internet and persecution of users. The strategy should include the development of anticensorship technologies.
- The Commission recommends that Congress encourage the administration to press China to freely admit U.S. government-sponsored journalists, such as those representing the Voice of America and Radio Free Asia. China frequently denies visas for such journalists, despite the fact that China's state-sponsored journalists are freely admitted in the United States. Options should be considered for linking Chinese cooperation to concrete consequences, including the possible use of U.S. visas for Chinese government journalists as leverage to gain admission of more U.S. government-supported journalists to China.

#### ENDNOTES

1. Recognizing deficiencies and loopholes in the current nuclear nonproliferation regime, President Bush has made several new proposals. First, that the Nuclear Suppliers Group nations (forty members) "refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants." Second, an "Additional Protocol" has been submitted to the Senate for ratification. This protocol requires members of the NSG to declare a wide range of nuclear activities and facilities and for these to be open to IAEA inspectors. Only those countries that agree to the protocol would be allowed to import equipment for civilian nuclear programs. And third, the president proposed a new IAEA committee to focus on safeguards and verification and that IAEA members would be precluded from serving on the board of governors or the special committee if they are under investigation for violations of the NPT.

2. Under the International Economic Emergency Powers Act (IEEPA), the president does have the authority to select from the range of sanctions, but this implementation is an unlikely remedy as the IEEPA is to be invoked only in the event of a national economic emergency.

3. The IEA is an autonomous body within the OECD. OECD membership is limited to countries that can demonstrate its attachment to the basic values shared by all OECD members: an open market economy, democratic pluralism, and respect for human rights.



## INTRODUCTION

The Commission's 2003–2004 reporting cycle was marked by a number of highly significant events that have underscored the expansive and complex nature of the U.S.-China bilateral relationship. These developments demonstrate the vital need for the U.S. government to devote the necessary resources to, and configure effective policies for, managing its relations with the People's Republic of China (PRC). While much of the nation's—and much of the world's—international focus has been on Iraq, Afghanistan, and the U.S. war on terrorism, the United States' relationship with China continues to evolve into our most significant bilateral relationship, one that poses both near-term and long-term economic and security challenges. Accordingly, U.S. policymakers must pay enhanced attention to the many facets of this important relationship.

Among the key developments affecting U.S.-China relations over the past year have been the following:

- Continuing growth of U.S.-China trade, which reached \$181 billion in goods trade in 2003, making China the United States' third largest trading partner, and continued growth of the U.S. goods trade deficit with China to \$124 billion, the United States' largest current and historic bilateral trade deficit.
- Continuing shifts in U.S. manufacturing to China and extensive domestic job losses in the U.S. manufacturing sector.
- The ongoing transition of power in China to a new generation led by President Hu Jintao and Premier Wen Jiabao.
- The escalating nuclear crisis on the Korean peninsula and China's role as intermediary.
- Heightening tensions in cross-Strait relations, marked by China's continued missile buildup and military modernization programs aimed at Taiwan, Taiwan's decision to hold a national referendum on the Chinese missile threat, and the reelection of Taiwan President Chen Shui-bian.
- Beijing's decision to undercut Hong Kong's autonomy and self-governance by unilaterally ruling out near-term direct elections for Hong Kong's chief executive and Legislative Council and prohibiting legislative debate in Hong Kong on this matter.

During the course of this reporting cycle, the Commission undertook a comprehensive analysis of the U.S.-China relationship in the nine areas specified in our Congressional mandate, examining them in the context of these and other emerging developments. The Commission held eleven public hearings, including field hearings in Columbia, South Carolina, and San Diego, California. Through these hearings, the Commission heard the perspectives of members of Congress, current and former senior U.S. government officials, representatives of industry and labor, academics and researchers, journalists, and individuals from trade-impacted communities. All

told, the Commission took testimony from more than one hundred thirty witnesses, the full record of which has been published in hearing-by-hearing volumes forwarded to the Congressional leadership and available on our Web site ([www.uscc.gov](http://www.uscc.gov)). A complete list of the hearings and witnesses can be found in appendix IV.

The field hearings and the publication of individual hearing volumes were new initiatives by the Commission this reporting cycle. The field hearings in South Carolina and San Diego allowed the Commission to hear “on-the-ground” perspectives in two regions of the country particularly affected by U.S.-China economic relations. The publication and distribution of our hearing records on a hearing-by-hearing basis, accompanied by a cover letter from the Commission setting out initial findings and, if appropriate, recommendations to Congress on the topic of the hearing, allowed more timely dissemination of the information elicited at our hearings to the Congress and to the interested public.

The Commission’s fact-finding and examination process also included supporting several significant research projects by outside experts. The Commission funded statistical analyses of China’s role in world trade and investment and China’s impact on the U.S. manufacturing base, and comprehensive reports on China’s acquisitions of foreign weapons and military technologies, as well as on China’s compliance record with its World Trade Organization (WTO) commitments. Moreover, the Commission continued its work in translating articles from influential publications within China discussing Beijing’s economic and security strategies and its perceptions of the United States. All of these items are available to the public on our Web site.<sup>1</sup>

To further support its research and investigations, the Commission undertook two fact-finding missions abroad. A delegation of the Commission traveled to the headquarters of the WTO offices in Geneva, Switzerland, during December 7–9, 2003, to interview WTO officials, officials of the U.S. Mission to the WTO, and representatives of key WTO member country delegations about China’s first two years of membership in the organization. A second Commission delegation traveled to Tokyo, Hong Kong, and Taipei during March 14–23, 2004, to meet with senior government officials, American and local business organizations, and experts from academia and the media on the economic and security implications for the region of China’s growing economic and political prowess. During the trip to Asia, the Commission delegation also observed the Taiwan presidential election on March 20, 2004.

### **STRUCTURE OF THE REPORT**

The Report presents its key findings, analysis, and recommendations to Congress in nine chapters, organized in three sections capturing the major themes of our Congressional mandate. While our analysis has been divided in this manner, all of these areas interrelate in assessing the broader question of how the U.S.-China economic relationship affects U.S. economic and national security interests. We recognize that the United States’ vast trade and investment relationship with China can never be divorced from the larger geopolitical and military developments at issue.

### **Section I: U.S.-China Trade and Economic Transfers**

- **Chapter 1—China’s Industrial, Investment, and Exchange Rate Policies**
- **Chapter 2—China in the World Trade Organization: Compliance, Monitoring, and Enforcement**
- **Chapter 3—China’s Presence in the Global Capital Markets**

The first section of the Report focuses on the economic dimension of the U.S.-China relationship. Bilateral trade and investment flows between the two countries are taking place on a massive and rapidly increasing scale. Assessing how these flows are affecting the U.S. economy—and with that U.S. economic security—is an essential area of the Commission’s work. In this section, the Commission examines three significant components of U.S.-China trade and investment: (1) China’s industrial, investment, and exchange rate policies and their impact in particular on the U.S. manufacturing base; (2) China’s record of compliance to date with its WTO commitments; and (3) U.S. financial flows to China via the global capital markets.

### **Section II: Regional and Geostrategic Developments**

- **Chapter 4—China’s Regional Economic and Security Impacts and the Challenges of Hong Kong and Taiwan**
- **Chapter 5—China’s Proliferation Practices and the Challenge of North Korea**
- **Chapter 6—China Energy Needs and Strategies**

This section groups chapters addressing China’s rise as a regional power and its central role in the global security challenges stemming from the proliferation of weapons of mass destruction (WMD) and access to energy supplies. Together, the chapters weigh the extent to which China is contributing to or undermining a more stable global security environment. China’s enhanced diplomatic efforts with its regional neighbors contrasts with its hard-line actions relating to democratic developments in Hong Kong and Taiwan. Its intermediary role in the North Korea nuclear crisis will be a major test of U.S.-China relations. Each of these developments poses serious challenges to existing U.S. interests and policies.

### **Section III: Technology and Military Advancements**

- **Chapter 7—China’s High-Technology Development and U.S.-China Science and Technology Cooperation**
- **Chapter 8—China’s Military Modernization and the Cross-Strait Balance**
- **Chapter 9—Media and Information Control in China**

This final section of the Report assesses China’s rapid advancements in technology development, military modernization, and media control. These advancements are altering bilateral and regional trade flows, the cross-Strait military balance, and the Chinese government’s ability to control the media and shape perceptions of the United States and its policies.

### FUTURE WORK

As the Commission moves into its third reporting cycle, it will continue its investigation into the areas outlined above and its year-to-year assessment of how the landscape is changing from the standpoint of U.S. economic and national security interests. Within this broad mandate, there are a number of areas that the Commission believes deserve particular attention over the coming year via Commission hearings and research. These areas include, but are not limited to, the following:

***Impact on the U.S. Economy***—The regional, state, and sectoral dislocations in the U.S. economy resulting from the bilateral trade and investment relationship and measures to help mitigate the impact of these dislocations on affected U.S. workers and communities.

***Global Factor Mobility***—The implications of increased mobility of capital, labor, and technology for the conduct and governance of international trade and economic activity.

***Tax Incentives***—How U.S. tax policies impact U.S. investment flows to China, particularly manufacturing and research and development (R&D).

***Capital Markets***—The role that state-invested enterprises (SIEs) play in the Chinese economy and as part of its capital markets strategies.

***Cross-Strait Policies***—The underlying premises of U.S. cross-Strait policies; how they have been altered by continuing changes on both sides of the Strait; and the policy adjustments the United States should make in response.

***Cooperation on Anti-Terrorism Initiatives***—The nature and extent of U.S.-China cooperation and coordination on anti-terrorism matters.

***U.S.-China Energy Relations***—How U.S. energy policies toward China impact other areas of concern in U.S.-China economic relations—such as manufacturing competitiveness—and how to find the appropriate balance.

***China's High-Technology Development***—The wide-ranging means by which U.S. technology flows to China and the effectiveness of U.S. government efforts to coordinate, monitor, evaluate, and address these flows; China's use of technology standards as a barrier to trade and an inducement for technology transfer; the policies and strategies implemented by the Chinese government to attract high-tech investment, including R&D, from the United States and other developed countries; and how these issues affect the competitiveness of the U.S. technology industry.

***Media Control***—Further review of the Chinese government's use of media controls to shape perceptions of the United States, in particular the effectiveness of e-mail, Internet access, and cell phone text messaging as forms of information flow in China; and the ability of the Chinese government to control these new media.

**ENDNOTE**

1. The research papers prepared by outside experts under contract to the Commission are intended to support the Commission's ongoing research efforts and are posted to the Commission's Web site in unedited form. The Commission's posting of these materials does not imply an endorsement by the Commission or any individual Commissioner of the views expressed therein.



## SECTION I

### U.S.-CHINA TRADE AND ECONOMIC TRANSFERS

The first three chapters of the Report focus on the economic dimension of the U.S.-China relationship. Bilateral trade and investment flows between the two countries are taking place on a massive and rapidly increasing scale. Assessing how these flows are impacting the U.S. economy—and with that U.S. economic security—is an essential area of the Commission's work. In this section, the Commission examines three significant components of U.S.-China trade and investment: China's industrial, investment, and exchange rate policies and their impact in particular on the U.S. manufacturing base, China's record of compliance to date with its World Trade Organization (WTO) commitments, and U.S. financial flows to China via the global capital markets.

Chapter 1 details the ways in which China's industrial, investment, and exchange rate policies are impacting the nature and scope of U.S.-China trade. The chapter focuses on the growing U.S. trade deficit with China, China's undervalued exchange rate, China's mercantilist trade and industrial policies, and the impact of these policies in particular on the U.S. manufacturing sector.

The dominant feature of U.S.-China economic relations is the U.S. goods trade deficit with China, which rose by more than twenty percent in 2003 to a record \$124 billion. Over the past ten years, the U.S. deficit with China has grown at an average rate of 18.5 percent, and if it continues growing at this rate, it will double in approximately four years. The U.S. deficit with China now constitutes over twenty-three percent of the total U.S. goods trade deficit, and China is by far the largest country component of the overall U.S. deficit. Moreover, U.S. goods trade with China—with \$28 billion in exports to China as compared with \$152 billion in imports—is by far the United States' most lopsided major manufacturing trade relationship as measured by the ratio of imports to exports. China is heavily dependent on the U.S. market, with exports to the United States constituting thirty-five percent of total Chinese exports in 2003, while only four percent of U.S. exports go to China. The trade deficit with China is of major concern because (i) it has contributed to the erosion of manufacturing jobs and jobless recovery in the United States, (ii) manufacturing is critical for the nation's economic and national security, and (iii) the deficit has adversely impacted other sectors of the U.S. economy as well.

A key factor contributing to the deficit is the undervaluation of the Chinese yuan against the U.S. dollar, which gives Chinese manufacturers a competitive advantage over U.S. manufacturers. Economic fundamentals suggest that the Chinese yuan is undervalued, with a growing consensus of economists estimating the level of undervaluation to be anywhere from fifteen to forty per-

cent. However, China persistently intervenes in the foreign exchange market to peg its exchange rate at 8.28 yuan per dollar. A second factor contributing to imbalances in U.S.-China trade is China's mercantilist industrial and foreign direct investment policies. These policies involve a wide range of measures including technology transfer requirements, government subsidies, discriminatory tax relief, and limitations on market access for foreign companies. A third factor is China's refusal to recognize workers' rights which results in artificial barriers to wage increases.

Chapter 2 reports on China's progress in meeting its commitments as a member of the WTO. China joined the WTO in December 2001. Its accession agreement is extremely complex, reflecting the need for special arrangements to address the fact that China joined the WTO without having met the requirements of a market economy. To protect against trade distortions and unfair trade practices resulting from China's nonmarket status, the agreement includes a special WTO review mechanism—the Transitional Review Mechanism—to monitor China's compliance and special safeguard provisions giving WTO members the right to protect themselves against sudden surges of Chinese imports. The Commission reviews China's WTO compliance record to date and the effectiveness of U.S. government and WTO monitoring and enforcement measures.

Though China has made progress in reducing tariffs and otherwise formally meeting a large number of its WTO accession commitments, significant compliance shortfalls persist in a number of key areas for U.S. trade. Among areas of concern, the Commission examines China's continued provision of direct and indirect subsidies to Chinese producers, use of unjustified technical and safety standards to exclude foreign products, poor enforcement of intellectual property rights, and discriminatory tax treatment for domestic semiconductor production.

Chapter 3 examines China's presence in the global capital markets, with special focus on equity markets. The Chinese government has selectively chosen firms—predominantly state-owned enterprises (SOEs)—to list on international capital markets, primarily in Hong Kong and New York, and may bring as much as \$23 billion in initial public offerings to global capital markets in 2004, a marked increase over the past few years. This process may increase the resources under Chinese government control because the government maintains majority control of these firms, while minority shareholder rights are virtually nonexistent.

Chinese corporate governance standards lag far behind those in the United States. Accounting and reporting standards are weak, and China lacks a sound, transparent system of credit ratings. As a result, even the most sophisticated investors lack adequate information when it comes to Chinese debt and equity listings in the market. This problem is compounded for investors in China-focused mutual funds, which are reliant on their fund managers. Many such funds outsource their research and due diligence to smaller firms in Hong Kong.

Another important issue explored in Chapter 3 is China's WTO commitment to open its financial sector to foreign competition. Owing to years of politically driven, noncommercial-based lending,

the Chinese banking system is beset by massive numbers of non-performing loans (NPLs). Many banks are technically insolvent and it is unlikely that they will be able to compete with foreign banks. Consequently, China appears to be dragging its feet on financial sector opening. These NPLs may also constitute a form of WTO-illegal subsidized capital.

A final area of investigation is the possible nexus between firms listing on U.S. and international capital markets and weapons proliferation and/or China's defense-industrial complex. Many SOEs were previously controlled by the People's Liberation Army (PLA) and there is concern that unofficial links to the PLA remain intact after privatization. One firm listed in China's capital markets (China North Industries Corporation), and available for purchase by qualified U.S. investors, has been sanctioned for proliferation by the U.S. government and there are concerns that other Chinese firms listed or trading in China or the United States may be engaging in similar activities. The Commission examines whether appropriate U.S. government agencies are focused on this problem and sufficiently coordinating responsive measures.



**CHAPTER 1**  
**CHINA'S INDUSTRIAL, INVESTMENT**  
**AND EXCHANGE RATE POLICIES**

***“ECONOMIC REFORMS AND UNITED STATES ECONOMIC TRANSFERS.*** *The Commission shall analyze and assess the qualitative and quantitative nature of the shift of United States production activities to China, including the relocation of high-technology, manufacturing, and R&D facilities; the impact of these transfers on United States national security, including political influence by the Chinese Government over American firms, dependence of the United States national security industrial base on Chinese imports, the adequacy of United States export control laws, and the effect of these transfers on United States economic security, employment, and the standard of living of the American people; analyze China’s national budget and assess China’s fiscal strength to address internal instability problems and assess the likelihood of externalization of such problems.”* [P.L. 108–7, Division P, Sec. 2(c)(2)(B)]

***“CORPORATE REPORTING.*** *The Commission shall assess United States trade and investment relationship with China, including the need for corporate reporting on United States investments in China and incentives that China may be offering to United States corporations to relocate production and R&D to China.”* [P.L. 108–7, Division P, Sec. 2(c)(2)(E)]

**KEY FINDINGS**

- In 2003, the United States ran a goods trade deficit of \$535.5 billion, of which \$124 billion was attributable to the deficit with China.<sup>1</sup> The U.S. trade deficit with China constituted 23.2 percent of the total U.S. goods trade deficit and China was the largest single country component of the overall deficit. Goods exports to China in 2003 were \$28.4 billion, while imports totaled \$152.4 billion. China is heavily dependent on the U.S. market, with approximately thirty-five percent of its exports going to the United States, while only four percent of U.S. exports go to China.<sup>2</sup> The magnitude of the goods trade deficit threatens the nation’s manufacturing sector, a sector that is vital for national and economic security.
- The U.S. goods trade deficit with China has continued to worsen in 2004. In the first three months of 2004, the deficit rose from \$24.7 billion to \$ 30.2 billion, a more than twenty-two percent increase. The increase in the Advanced Technology Products (ATP) trade deficit has been proportionately even larger. In the first

three months of 2004, the ATP deficit rose from \$3.3 billion to \$6.3 billion, an eighty-nine percent increase.

- According to the Bureau of Economic Analysis, U.S. gross domestic product (GDP) growth in 2003 was 3.1 percent, and the worsening of the overall goods trade deficit lowered growth by 0.42 percent. The worsening of the U.S.-China trade deficit accounted for over one quarter of this negative contribution to growth.
- China is systematically intervening in the foreign exchange market to keep its currency undervalued. The undervaluation of the Chinese yuan has contributed to the trade deficit with China and has hurt U.S. manufacturing. This is because an undervalued yuan makes Chinese manufactured goods cheaper in the United States, while making U.S. manufactured goods more expensive in China. The undervalued yuan has also hurt the agricultural sector. Had the Chinese yuan appreciated, as dictated by market forces, this would have made U.S. agricultural products cheaper in China which in turn would have increased Chinese demand for these products. An immediate and significant upward revaluation of the Chinese yuan against the dollar, combined with the removal of discriminatory Chinese trade practices, should help reduce the U.S. trade deficit with China. There is also a need for other East Asian countries (Japan, Taiwan, South Korea) to cease improperly intervening in currency markets to gain competitive advantage. These countries run large trade surpluses with the United States and keep their exchange rates low, in part, to stay competitive with China. If China were to revalue its currency they too would likely adjust. The U.S. Treasury Department has repeatedly downplayed these problems in its semi-annual report on international exchange rate policies, resulting in the administration's taking inadequate action against currency manipulation.
- China is continuing to attract massive levels of foreign direct investment (FDI), including \$57 billion in 2003. Its policies to attract FDI have been supplemented by industrial policies aimed at developing national productive capacity in selected "pillar" industries. These policies support Chinese corporations through a wide range of measures that include tariffs, limitations on access to domestic marketing channels, requirements for technology transfer, government selection of partners for major international joint ventures, preferential loans from state banks, subsidized credit, privileged access to listings on national and international stock markets, discriminatory tax relief, privileged access to land, and direct support for R&D from the government budget. Such policies give Chinese industry an unfair competitive advantage, thereby contributing to erosion of the U.S. manufacturing base. Many of these policies are not permitted under World Trade Organization (WTO) and U.S. trade rules.
- The textile and apparel industries have suffered enormous trade-related job losses. Employment in textile mills, textile product mills, and apparel has fallen by nearly half over the last decade. The ending of the Multifiber Arrangement (MFA) at the end of 2004 promises to significantly increase U.S. imports of Chinese textile and apparel products and wreak further heavy job loss on these sectors.

- More generally, the problems afflicting U.S.-China economic relations epitomize many of the economic problems surrounding globalization. These include loss of manufacturing jobs, outsourcing of service sector jobs, and international wage competition, all of which put downward pressure on the wages of many U.S. workers. Policymakers need to address the systematic competitive pressures and dislocations that China's policies and practices exert on U.S. labor markets.

### OVERVIEW

The overvaluation of the dollar against the world's currencies has been a major contributing factor in the worsening of the U.S. trade deficit over the last several years. Of particular concern is the undervaluation of the yuan against the dollar. China pegs its currency to the dollar, and the yuan has traded at 8.28 per dollar since 1998. During this period, China has experienced massive export sector productivity growth driven by FDI. This situation has enormously strengthened China's competitive advantage, rendering the yuan undervalued. In a free market, China's productivity growth, trade surplus, and inflows of FDI would have caused significant exchange rate appreciation. However, China systematically intervenes in the currency market to prevent this from happening, thereby maintaining an important competitive advantage for Chinese exports.

During the past year, the Commission held several hearings analyzing the impact of U.S.-China trade and investment on the U.S. economy and particularly on the U.S. manufacturing base. The Commission held a hearing on September 25, 2003, in Washington, DC, where testimony was presented by members of the House and the Senate, economists, experts on China's economic development, and representatives of U.S. manufacturing and labor organizations. This hearing focused on (1) China's exchange rate policy and its impact on the U.S.-China trade deficit and U.S. manufacturing activity, and (2) China's investment strategies aimed at attracting FDI.

A field hearing was held on January 30, 2004, in Columbia, South Carolina. It focused on China's impact on the U.S. manufacturing base, with a special focus on China's impact on the textile, apparel, steel, and plastics industries. South Carolina suffered the largest percentage loss of jobs of any state between November 2002 and November 2003, and Columbia suffered the largest percentage loss of jobs for any metropolitan area in the United States.<sup>3</sup> The hearing included a panel on the community effects of a declining manufacturing base. These impacts include loss of local tax bases needed for funding education and essential services. The Commission heard testimony from local political leaders, civic leaders, and business and labor leaders.

The Commission also held a field hearing on *China as an Emerging Regional and Technology Power: Implications for U.S. Economic and Security Interests* in San Diego, California on February 12-13, 2004. This hearing focused on China's high-tech development strategy, China's role in the global supply chain, and the implications for U.S. technological leadership.

## ANALYSIS AND FINDINGS

### **The Imbalanced U.S.-China Trade Relationship and Its Impact on U.S. Manufacturing**

The dominant feature of U.S.-China economic relations in 2003 was the goods trade deficit. This widened from \$103 billion in 2002 to \$124 billion in 2003, a 20.3 percent increase. The trade deficit with China has now grown at an average rate of 21 percent for the last thirteen years, rising from \$10.4 billion in 1990 to \$124 billion in 2003.

This expansion of the U.S. trade deficit with China occurred in tandem with a worsening of the overall U.S. goods trade deficit. Between 1997 and 2003, the total U.S. goods trade deficit rose from \$180.5 billion to \$535.5 billion. However, though part of an overall trade deficit problem, there are several features of the China trade deficit that stand out and mark it as qualitatively different and more problematic:

- The China deficit represents 23.2 percent of the overall U.S. goods trade deficit (see figure 1.1 at the end of this chapter). This compares with Japan, which represents 12.3 percent of the deficit, and the eleven countries of the euro area, which represent 14.1 percent.
- In 2003, the total U.S. goods trade deficit rose by \$67.2 billion to \$535.5 billion, and China accounted for 31.3 percent of the increase. If the U.S.-China goods trade deficit continues to grow over the next five years at an average annual rate of twenty-one percent—as it has since 1990—it will rise to \$321 billion in 2008.
- Since 1988, the goods trade deficit with China has grown from \$2.8 billion to \$124 billion, while the total U.S. goods trade deficit rose from \$118.5 billion to \$535.5 billion. The deficit with China has therefore become a larger share of the total deficit. Figure 1.2 shows the increasing U.S.-China goods trade deficit and the increasing Chinese share of the total U.S. goods trade deficit. This pattern has two serious implications. First, China is contributing to a higher overall deficit, which costs the United States significant numbers of jobs and reduces economic growth. Second, China is displacing exports from other developing countries, causing problems in those countries.
- The U.S.-China trade deficit represents the United States' most lopsided major manufacturing trade relationship. This can be seen from the country import-export ratios shown in figure 1.3, which show that Chinese imports into the United States are over five times larger than U.S. exports to China. For other major manufacturing trading partners, the ratios are much lower, indicating a better balance between imports and exports.
- U.S.-China trade also raises strategic technology concerns. China is now the largest supplier of advanced technology products (ATP) imports (\$29.3 billion in 2003) to the United States, and the U.S. ATP deficit with China is also the largest (\$21.0 billion in 2003). Since 1998, the United States has moved from a global ATP trade surplus of \$29.9 billion to a global ATP deficit of \$27.4 billion in 2003. Figure 1.4 shows the evolution of the U.S. global ATP trade balance and the ATP trade balance with China. The

ATP trade deficit with China now accounts for seventy-seven percent of the global ATP deficit.<sup>4</sup>

- China has taken inadequate steps to correct the imbalanced trade relationship with the United States, including taking no action to revalue its fixed exchange rate. This contrasts with Canada and the euro area countries. This group had a combined goods trade surplus with the United States of \$195.8 billion, but their currencies have appreciated significantly against the dollar (see figure 1.5). This stands to reduce future trade deficits by making their products more expensive and U.S. products cheaper. The euro has appreciated by almost thirty-five percent since January 2, 2002.<sup>5</sup>

The expansion of the total U.S. trade deficit and the U.S. trade deficit with China has occurred against a troubling background of “jobless” recovery and continued loss of U.S. manufacturing jobs. Though 2003 was a year of recovery marked by significant GDP growth, the U.S. economy ended it with sixty-one thousand fewer jobs than in December 2002.<sup>6</sup> Especially troubling was the continued loss of jobs in manufacturing, the sector that is most impacted by international trade. Over the course of 2003, manufacturing lost a further 575,000 jobs, ending the year with total employment of 14,324,000. The lion’s share of these losses was in durable manufacturing, which lost 363,000 jobs and employment fell to 10,044,000. Manufacturing employment contracted for forty-three consecutive months between July 2000 and February 2004—an unprecedented event. During this period, total manufacturing employment fell from 17.3 million to 14.3 million.

The worsening of the trade deficit, the jobless recovery, and the decline in manufacturing employment are interconnected. The decline in manufacturing employment during the early stages of economic recovery appears to be linked to the new phenomenon of “jobless” recovery. The first jobless recovery occurred in 1991–92, while the second jobless recovery has been in place since 2001. This pattern of jobless recovery from recession marks a break from business cycle recoveries prior to 1991. A salient feature of these two jobless recoveries is the failure of manufacturing employment to rebound. This is shown in figure 1.6, which presents the percentage increase in private employment and manufacturing employment two years into economic recovery for nine business cycles since 1945.<sup>7</sup> In the seven recoveries from 1949 to 1990, manufacturing employment grew robustly as the economy entered the recovery stage. However, in the two recoveries since, manufacturing employment has fallen for a long while into the recovery. In the first jobless recovery, which began in March 1991, manufacturing employment continued falling through October 1992. In the current jobless recovery, which began in November 2001, manufacturing employment continued falling through February 2004. It has expanded in March and April of 2004, but it is still too early to judge the strength of this employment recovery. The uncertainty of this recovery is also indicated by average real hourly wages which fell slightly in the first quarter of 2004 and are essentially unchanged from the level prevailing in December 2001.<sup>8</sup>

The decline in manufacturing employment is in turn linked to the trade deficit. In 2003, the non-petroleum goods trade deficit

was \$415 billion, versus \$375 billion in 2002. This represents an increase of \$40 billion. Using an input-output methodology, the Economic Policy Institute (EPI) estimates that in 2000 every \$1 billion of imports into the United States embodied 9,500 jobs.<sup>9</sup> Applying this jobs multiplier, the worsening of the goods trade deficit in 2003 cost 380,000 jobs.

A similar calculation can be applied to the China trade deficit, which jumped from \$103 billion in 2002 to \$124 billion in 2003. Using a job multiplier of 9,500 per billion dollars, the \$21 billion increase in the China deficit in 2003 implies a loss of 199,500 jobs. Since 1997, the China trade deficit has risen by \$74 billion to \$124 billion. Applying the job multiplier, this yields a total loss of 703,000 jobs.

Some argue that the loss of manufacturing jobs is unrelated to the trade deficit and is due to increased manufacturing productivity and a decline in consumption of manufactured goods. The Commission disagrees with this argument. A recent EPI study shows that consumption of manufacturing goods as a share of total demand remains largely unchanged. And though rising productivity and the recession would have reduced manufacturing employment, the trade deficit has also mattered. According to EPI, the increase in the manufactured goods trade deficit accounts for 58 percent of manufacturing job loss between 1998 and 2003 and 34 percent of the loss between 2000 and 2003.<sup>10</sup>

### ***The Importance of Manufacturing***

Trade deficit-induced losses of manufacturing jobs represent a major economic and national security concern. As noted by Commerce Secretary Don Evans, “The President believes that our economic and national security require a stable, robust manufacturing sector that produces sophisticated and strategically significant goods, here in the United States.”<sup>11</sup>

The manufacturing sector is a major engine of economic growth for the U.S. economy. Two-thirds of R&D spending and more than ninety percent of new patents derive from the manufacturing sector.<sup>12</sup> Productivity growth in the U.S. economy has increased during the last decade, but the increase has been largest in the manufacturing sector, where the rate of increase is twice the rate of the overall economy. Manufacturing is also critical to America’s high standard of living, as it is through manufacturing that America pays its way in the world economy. Manufacturing accounts for over eighty percent of U.S. exports of goods, and it accounts for two-thirds of total exports.<sup>13</sup>

A recent study by the National Association of Manufacturing’s Council of Manufacturing Associations, *Securing America’s Future: The Case for a Strong Manufacturing Base*, warns that “if the U.S. manufacturing base continues to shrink at the present rate and the critical mass is lost, the manufacturing innovation process will shift to other global centers. If this happens, a decline in U.S. living standards in the future is virtually assured.”<sup>14</sup> Finally, not only does the loss of manufacturing pose a threat to future standards of living, but it also poses a threat today. Manufacturing jobs pay twenty percent more on average and provide better benefits.

Their disappearance therefore undermines the economic health of America's middle class.

The importance of manufacturing is captured in testimony before the Commission by Franklin J. Vargo, vice president for international economic affairs, National Association of Manufacturers:

*(t)he United States economy would collapse without manufacturing, as would our national security and our role in the world. That is because manufacturing is really the foundation of our economy, both in terms of innovation and production and in terms of supporting the rest of the economy. For example, many individuals point out that only about three percent of the U.S. workforce is on the farm, but they manage to feed the nation and export to the rest of the world. But how did this agricultural productivity come to be? It is because of the tractors and combines and satellite systems and fertilizers and advanced seeds, etc., that came from the genius and productivity of the manufacturing sector.*

*Similarly, in services—can you envision an airline without airplanes? Fast food outlets without griddles and freezers? Insurance companies or banks without computers? Certainly not. The manufacturing industry is truly the innovation industry, without which the rest of the economy would not prosper.<sup>15</sup>*

These views are shared by the AFL–CIO. In a report submitted as part of the testimony of Richard L. Trumka, secretary-treasurer of the AFL–CIO, before the Senate Committee on Banking, Housing, and Urban Affairs on “The Impact of the Exchange Rate on the United States Balance of Trade, Economic Growth and Employment” held on May 1, 2002, the AFL–CIO states:

*Loss of manufacturing jobs carries a high cost. Manufacturing is widely recognized as a principal engine of productivity growth, and there is evidence of positive productivity spill-overs from manufacturing to non-manufacturing. There is also emerging evidence that some of the greatest gains from new economy information technologies may come from application of these technologies to manufacturing. Shrinking the manufacturing sector results in a smaller base on which to build productivity growth and on which to apply the new information technologies. Consequently, the U.S. stands to have slower future productivity growth, which will result in a lower future standard of living.<sup>16</sup>*

### **Trade Dislocations and the Impact on Communities**

The loss of manufacturing jobs caused by the U.S. trade deficit has profound implications for many communities. At its Columbia, South Carolina, hearing, the Commission listened to powerful testimony on the extent to which trade-related economic dislocations have impacted many South Carolina manufacturing communities. The Commission was told that the significant loss of jobs in South Carolina due to import competition and off-shoring had resulted in the erosion of the local tax base in many communities. Tax base

erosion then contributes to declining law enforcement and infrastructure investment, and declines in the provision of health services, all of which have a debilitating impact on families and quality of life.

As engagement with the global economy grows, it is likely that there will continue to be significant job losses as a result of outsourcing and changing patterns of production. Such job losses often impose large costs on those whose jobs are outsourced. Given that job loss stands to be a permanent feature of the economic landscape, the Commission believes there is a need for new policies to help displaced workers.

### **Measuring the U.S.-China Trade Deficit**

Official U.S. data show a large and growing U.S. trade deficit with China. Official Chinese data show a significantly smaller Chinese trade surplus with United States. According to U.S. data, the deficit was \$124 billion in 2003, whereas Chinese data report it as \$58.6 billion.<sup>17</sup> This discrepancy has led to claims by the Chinese government that the U.S.-China trade deficit is overstated. However, there are serious concerns about the veracity and reliability of Chinese data.

One reason for the discrepancy is the U.S. practice of treating Chinese exports to Hong Kong that are reexported to the United States as Chinese product, whereas China argues these goods should be counted as an import from Hong Kong. Chinese officials have also argued that U.S. imports from China routed through Hong Kong are overstated because they include value added in Hong Kong.

The Chinese government's approach to counting U.S.-China trade is subject to serious methodological difficulties associated with the problem of "transfer pricing." For the methodology to work, it is vital that goods imported into Hong Kong and reexported to the United States be counted at their proper market value. The current U.S. approach to measuring bilateral trade is not afflicted by this problem and for this reason is superior.

An alternative way of getting an overall picture of U.S. trade with China is to include both China and Hong Kong. According to U.S. data, in 2003 Hong Kong had a trade surplus with the United States of \$4.7 billion. Adding this to the \$124 billion China deficit figure makes for an adjusted China deficit of \$119.3 billion, which is still double the official Chinese estimate of \$58.6 billion.

To address these differences, U.S. and Chinese trade officials recently agreed to establish a new working group to try and bridge the gap between how each country measures bilateral trade.<sup>18</sup> Improved data collection is always welcome. However, the Commission is concerned that these efforts not be used by the administration or Chinese government as a way of diminishing the China trade deficit so as to reduce the salience of the problem.

### **China's Exchange Rate Policies and the Impact on the U.S. Economy**

#### ***Effect of Misaligned Currencies***

International trade is dominated by manufacturing trade, and overvaluation of the dollar has significantly reduced the inter-

national competitiveness of U.S. manufacturing industry. This lack of competitiveness is reflected in the growing U.S. trade deficit, which has negatively impacted manufacturing output and employment. The negative effects of the overvalued dollar on manufacturing operate through several channels.<sup>19</sup> First, overvaluation makes exports relatively more expensive, reducing foreign country demand for U.S. manufactured goods. Second, overvaluation makes imports cheaper, inducing a substitution in spending away from domestically produced manufactured goods to foreign-produced goods. Third, overvaluation reduces the profitability of U.S. manufacturing firms by making foreign goods cheaper, and this reduces firms' incentive to invest in new production capacity. Fourth, by making U.S.-based production relatively more expensive, an overvalued dollar gives U.S. companies an incentive to shift production offshore and to build new production facilities offshore.

These negative effects on the trade deficit and manufacturing in turn adversely impact overall U.S. economic growth. According to the Bureau of Economic Analysis, the U.S. goods trade deficit lowered GDP growth by 0.09 percent in 2001, 0.71 percent in 2002, and 0.42 percent in 2003. The trade deficit therefore deepened the recession and is hampering the recovery.<sup>20</sup>

The critical economic significance of exchange rates was summarized in the testimony before the Commission of Franklin J. Vargo; "Only 11 percent of the cost of a U.S. manufactured good is labor. . . . If a product gets a twenty or forty percent price advantage because of a currency, that is a much more significant factor."<sup>21</sup>

The reason is that currency misalignments work on the entire cost base, so that an overvalued currency raises the entire cost structure.

### ***Agriculture and the Dollar***

Agriculture is also affected by exchange rates.<sup>22</sup> Approximately twenty percent of U.S. agricultural production is exported to other countries, and agricultural products are commodities.<sup>23</sup> This means competitiveness is crucial, and competitiveness is significantly affected by the exchange rate. The overvaluation of the dollar against most of the world's currencies, combined with the fact that China pegs its currency to the dollar, has meant that U.S. agricultural exports have been rendered less competitive in the China market. This has reduced the benefits to U.S. agriculture of China's entry into the WTO.

An upward revaluation of the yuan against the dollar will make U.S. agricultural products cheaper in Chinese currency terms, thereby increasing Chinese demand for U.S. agricultural exports.

### ***Remedying the Overvalued Dollar and Undervalued Yuan***

There is widespread agreement that the dollar has been overvalued against the currencies of the world's major trading countries.<sup>24</sup> With regard to China, the Commission heard testimony that the yuan is undervalued by between fifteen and forty percent.<sup>25</sup> Based on this testimony and other economic evidence, the Commission believes that

- the yuan needs to be revalued substantially upward against the dollar;

- As part of this revaluation, the yuan should be pegged against a trade-weighted basket of currencies to avoid excessive fluctuation against the currency of any single country;
- China should refrain from adopting a floating exchange rate at this time, as its banking system and financial markets are not yet prepared for such an arrangement; and
- China should take active steps to reform its banking system and financial markets to prepare them for an eventual floating exchange rate.

### ***The Case for Revaluing the Yuan***

The dollar has now entered a period of correction against the currencies of other industrialized countries. As shown in figure 1.5, since January 2, 2002, it has fallen 33.3 percent against the euro, 16.4 percent against the yen, and 14.4 percent against the Canadian dollar. In addition, it has also fallen significantly against other currencies such as the pound sterling and the Australian dollar. However, there has been no adjustment against the Chinese yuan, which is fixed through official intervention. Additionally, there has been little in the way of correction against the Taiwanese, South Korean, and Singaporean currencies, all of which countries run large trade surpluses with the United States.

This lack of adjustment has occurred despite the fact that there is compelling evidence that the yuan is undervalued. China now constitutes the single largest contributor to the U.S. trade deficit, and economic fundamentals support the claim that the yuan is undervalued. China's economy has been characterized by a trade surplus (external imbalance) and by rapid economic growth with incipient inflation (internal imbalance).<sup>26</sup> A currency revaluation will help restore both trade balance and domestic economic balance by reducing exports and reducing demand for domestically produced goods. Conversely, the U.S. economy has a large trade deficit (external imbalance) and excess capacity and unemployment (domestic imbalance). Dollar devaluation will help restore both external and internal balance by increasing exports and demand for U.S.-produced goods.

A revaluation of the yuan is also needed for global economic equilibrium. As noted above, the United States has significant trade deficits with other East Asian economies, including Taiwan and South Korea. These economies are apprehensive about revaluing their currencies for fear that they will lose competitiveness relative to China. A revaluation of the yuan would likely free this logjam, allowing these economies to revalue too, thereby smoothing and accelerating the process of dollar adjustment.

*Indirectly, however, China has an additional impact because Japan, South Korea, Taiwan, and others throughout Asia claim they have to intervene and keep their currencies undervalued because of the very low manipulated Chinese rate. In other words, they say they have to manipulate their currencies to remain competitive with China. There is also good reason to believe that if China were to substantially revalue its currency, the other Asians could be persuaded to scale back their Central Bank purchases and allow their currencies to float upward.<sup>27</sup>*

Additionally, failure to revalue China's currency while currencies of other major trading partners appreciate promises to cause economic disruption. This is because other economies—such as Japan and the euro area—are implicitly being forced to take on a larger burden of adjustment to correct the U.S. trade deficit, while the country with the largest surplus (China) undertakes no adjustment.

***Arguments Against Revaluing the Yuan Do Not Hold***

Some argue that the yuan does not need to be revalued. The Commission rejects this position.

- (1) One argument is that revaluing the yuan could lead to a financial crisis in the Chinese banking system that ends up perversely generating a lower value of the yuan. The claim is that opening China's capital account and floating the yuan risks a massive exodus of Chinese savings that could trigger a domestic financial crisis and yuan depreciation. Thus, paradoxically, capital account liberalization and yuan floating could actually cause depreciation rather than appreciation.

However, this argument confuses revaluation of China's exchange rate with a shift to a floating exchange rate. The Commission does not recommend floating the yuan at this time. Instead, China should significantly revalue the yuan upward while maintaining capital controls and a fixed exchange rate over the near term. This would address the underlying balance of payments disequilibrium problem while avoiding financial crisis. China has begun to recognize its problem of domestic financial fragility but must now accelerate the process of remedying it. The fact that capital account opening could trigger a massive outflow of Chinese bank deposits reveals the inhospitable climate of Chinese financial markets for domestic wealth owners. China must therefore move to make its financial assets more attractive. The threat of domestic capital flight is not going to disappear. Indeed, it stands to grow in magnitude as Chinese household financial wealth grows with development and households in turn seek to diversify their portfolios internationally. China must therefore begin enacting measures that make domestic financial assets more attractive. These measures should include corporate and market governance reforms and issuance of an increased supply of attractive domestic financial assets. The bottom line is that China's domestic financial fragility does not justify an undervalued exchange rate that exports deflationary pressures and destroys U.S. manufacturing jobs.

- (2) A second argument is that there is no need to revalue, since market forces will force a revaluation despite the Chinese government's exchange rate intervention. This argument is based on the discredited economic doctrine of monetarism. The claim is that China's persistent trade surplus forces its central bank to sell yuan and buy dollars to prevent appreciation and that this expands the money supply, which will in turn cause inflation that drives up Chinese prices. As a result, China will gradually become less competitive, while U.S. manufacturing companies will become more competitive.

The above monetarist argument is flawed. First, even if the mechanism worked, there are long and unpredictable lags between expansion of the money supply and higher prices. In the meantime, American manufacturing firms may be compelled to close down, with consequent loss of jobs. Second, Chinese monetary authorities can take measures to mitigate the effect of a rising money supply on prices. These include raising reserve requirements in the banking system and sterilizing the monetary expansion by selling bonds and thereby withdrawing money from circulation.

- (3) A third argument is that the China trade deficit is unrelated to the exchange rate and is the result of a shortage of U.S. saving—principally the result of the large U.S. government budget deficit. The argument is that the U.S. economy is consuming in excess of what it can produce and has to import the balance.

The Commission believes that the United States must address its chronic budget deficits, but it rejects the notion that this obviates the need for China to address its currency undervaluation. Contrary to the claims of the saving shortage hypothesis, the U.S. economy currently has severe excess manufacturing capacity and is capable of producing significantly increased manufacturing output. A shortage of national savings is not the problem. The real problem is that the misaligned exchange rate results in U.S. goods being too expensive relative to foreign goods. This drives down demand for U.S.-produced output, and, over a more extended time period, contributes to the elimination of U.S. manufacturing capacity and the creation of a structural trade deficit. Plant closures and the loss of well-paying jobs in turn undermine the tax base and contribute to state and local fiscal problems.

- (4) A fourth argument is that though the United States has a large trade deficit with China, China's overall trade surplus with the rest of the world has been much smaller, and in the first quarter of 2004 it registered a small deficit. Consequently, China's currency may not be undervalued.

Again, the Commission rejects this argument. Figure 1.1 shows that the United States has a trade deficit with every region of the world, and the deficit with China is especially large. This pattern points to a need for a generalized realignment of the dollar, and China should revalue its currency as part of that realignment. Second, for the last several years, China has run a global trade surplus. Moreover, the fact that China has run a surplus even as it grew at nine percent per annum is compelling evidence of undervaluation. Any other country that grew at that rate would have quickly run up a huge trade deficit. The small move into deficit in the first quarter of 2004 reflects continuing breakneck growth and rising commodity prices, particularly in oil. That China still essentially has balanced trade under these conditions is testimony to how undervalued the yuan is. Finally, China is also running a capital account surplus generated by the flood of FDI into China. This means China has an enormous basic balance surplus, defined as the combined surplus on current and capital accounts. Thus, in 2003, China had a current account surplus of \$45.9 billion and a

capital account surplus of \$52.7 billion, making for a basic balance of \$98.6 billion.<sup>28</sup> This put significant upward pressure on the exchange rate, but purchases of \$116.8 billion of foreign exchange by China's central bank prevented the exchange rate from appreciating.<sup>29</sup>

***Prohibitions on Currency Manipulation***<sup>30</sup>

By manipulating its currency to keep it artificially low, China effectively gives its exporters an exchange rate subsidy. Such currency manipulation, as discussed below, is illegal under the terms of both China's International Monetary Fund (IMF) and WTO membership. In addition, U.S. trade law also has provisions to address currency manipulation by countries.

With regard to U.S. law, section 3004 of the Omnibus Trade and Competitiveness Act of 1988 requires the Treasury Department to analyze the exchange rate policies of foreign countries, in consultation with the IMF, and to consider whether any countries are manipulating the rate of exchange between their currency and the dollar for purposes of preventing effective balance of payments adjustments or gaining an unfair advantage in international trade. The Treasury is required to report to the Senate Banking Committee twice each year with an assessment of currency manipulation by trading partners. The Secretary of the Treasury is required to undertake negotiations with those countries found to be manipulating their currencies if they are also running a material global current account surplus and a significant bilateral surplus with the United States, unless such negotiations would have a serious detrimental impact on vital national economic and security interests. In its latest report on currency manipulation (April 2004) the Treasury again found that "no major trading partner of the United States met the technical requirements for designation under the Omnibus Trade and Competitiveness Act of 1988."<sup>31</sup> In arriving at this finding, the Treasury gives no indication as to what these technicalities are, and the finding of no manipulation is hard to comprehend in light of the IMF's definition of manipulation as "protracted large scale intervention in one direction in the exchange market."

Currency manipulation is inconsistent with membership in both the IMF and the WTO. Article IV, section 1, of the IMF's Articles of Agreement requires members to "avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members." The IMF surveillance provision related to article IV defines currency manipulation as "protracted large scale intervention in one direction in the exchange market." The WTO rules derive from the General Agreement on Tariffs and Trade's (GATT) article XV dealing with exchange rate arrangements, which stipulates that members should not take exchange rate actions that "frustrate the intent of the provisions of this agreement." The intent of the agreement is stated in the preamble, which declares the objective to be "entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade." Moreover, there is a direct linkage between GATT article XV and IMF article IV, since the GATT's "frustrate the intent" test is to be resolved

through full consultation with the IMF, and members are instructed to “accept all findings of statistical fact presented by the Fund relating to foreign exchange.”

Under IMF and WTO rules, countries are allowed to maintain fixed exchange rates. However, exchange rate parities should be fixed at a level consistent with market equilibrium so that buying and selling pressures should largely balance out. If the exchange rate is set too low, there will be need for protracted, large-scale, one-way market intervention to prevent appreciation. This is the IMF’s definition of currency manipulation, and it is how a country maintains an undervalued currency in order to gain competitive advantage.

The evidence shows that there can be little doubt that China has been engaged in extensive, “protracted large-scale intervention in one direction.” Such intervention has China’s central bank buying dollars in exchange for yuan deposits in the Chinese banking system. Between December 2000 and December 2003, foreign exchange holdings of China’s central bank more than doubled from \$166 billion to \$403 billion. Figure 1.7 reports annual official purchases of foreign exchange by China, Japan, Taiwan, and South Korea, and it shows a strong upward trend. In 2001, Chinese official purchases were \$46.6 billion. In 2002, official purchases were \$74.2 billion, and in 2003 they were \$116.8 billion.

Not only has China’s central bank been intervening to hold down the value of its currency but so too have several other East Asian countries. The Bank of Japan’s annual official purchases of foreign exchange rose from \$40.5 billion in 2001 to \$201.3 billion in 2003. Over the period December 2000–December 2003, Japan engaged in even more extensive official intervention and accumulated even more dollar reserves than China. And in January 2004, the Bank of Japan bought a staggering \$68.2 billion dollars in just one month. Taiwan has also engaged in persistent protracted official intervention, and in 2003 its holdings of reserves rose by \$45 billion to \$206 billion. A similar story of persistent intervention can be told for South Korea, and in all cases the problem has worsened over the course of 2003. These developments reveal a systemic exchange rate problem, with the United States’ major trading partners in East Asia gaming the system to gain competitive advantage. These practices call for a firm and credible response on the part of the U.S. government that applies to all countries that improperly intervene to hold down currency values.

There is reason to believe that the currency interventions of East Asian countries are closely linked to China’s intervention. All fear the economic dislocation that could result from loss of competitive advantage to China, and hence their parallel intervention. The implication is that if China were to revalue upward, other East Asian countries would cease intervening and let their currency values move upward.

### ***Financial Markets, U.S. Interest Rates, and China’s Exchange Rate Policy***

A final point concerns the implications for U.S. financial markets and interest rates of China’s exchange rate policy. For the last several years, China has run large trade surpluses with the United

States. To prevent the yuan from appreciating against the dollar, China has purchased dollars in the foreign exchange market and then recycled these purchases into U.S. financial assets. As a result, China's foreign reserves, which are largely made up of short-term U.S. government liabilities, stood at \$420.4 billion at the end of November 2003.<sup>32</sup>

The accumulation of these holdings has strengthened the demand for U.S. government bonds, which has raised their price and lowered their interest rate. Consequently, some fear that if China ceases to intervene in the currency market, this will lower bond prices and drive up interest rates.

This fear is misplaced. First, if China were to cease intervening, the effect on the overall short-term U.S. government bond market would be relatively small given the size of the market. Second, China has been accumulating short-term bills and bonds, and the Federal Reserve can step in if it chooses to and make up for any decline in Chinese purchases.

Whereas ending Chinese currency intervention would have negligible effects on interest rates, a more serious threat comes from the possibility that the People's Bank of China might choose to re-allocate its existing portfolio holdings and shift out of U.S. bonds. If this shift were large and sudden, it could cause a spike in U.S. interest rates. Moreover, given the use of derivative contracts and other exotic risk sharing and speculative financial instruments, such a spike could potentially trigger financial turmoil. This is a dangerous economic vulnerability for the United States, and it highlights how sustained trade deficits confer economic leverage on other countries.

### **China's Industrial and Investment Policies**

China's surging exports and trade surplus are based on its rapidly rising industrial capacity. This capacity is in turn built on massive FDI. In 2002, China received \$52.7 billion of FDI, and it surpassed the United States as the world's largest recipient of FDI in that year.<sup>33</sup> In 2003, the inflow of FDI was \$57 billion, and the total stock of FDI in China now exceeds \$400 billion.<sup>34</sup> With inflows anticipated to continue at this level, China will soon be the second largest holder of FDI in the world, after the United States.

The impulse behind the flood of FDI into China is the view held by global corporations that China is central to long-term strategy. Many companies view China as a production platform for exporting to the rest of the world, and they also see China's potentially massive internal market as providing profitable future opportunities. The attractiveness of China as a site for FDI rests on several factors, one of which is the abundance of cheap labor. However, China's mercantilist trade policies and poor labor and environmental policies also play an important role. Thus, the following holds true:

- The maintenance of an undervalued exchange rate keeps production costs low, measured in foreign currency terms. This makes it attractive for global companies to locate export production facilities in China.
- Failure to enforce internationally recognized labor and environmental standards is another source of competitive advantage that is used to attract investment. Just as an undervalued ex-

change rate can lower domestic production costs, so too can a repressive labor system such as China's. That system denies workers' rights of freedom of association and collective bargaining, and it enforces a system of work permits that discriminates against rural workers.

- Policies to attract FDI have been supplemented by industrial policy aimed at developing national productive capacity in selected "pillar" industries. This policy supports Chinese corporations through a wide range of measures that include tariffs, limitations on access to domestic marketing channels, requirements for technology transfer, government selection of partners for major international joint ventures, preferential loans from state banks, subsidized credit, privileged access to listings on national and international stock markets, tax relief, privileged access to land, and direct support for R&D from the government budget.<sup>35</sup>

China's buildup of national and multinational productive capacity raises many concerns. Its rapid increase in export capacity could lead to even larger future U.S.-China trade deficits, making it critical that China be obliged to live up to its WTO obligations and play by the rules of the game. At the sectoral level, the rapid buildup of steel-producing capacity, on the basis of subsidized finance, poses a threat of massive excess capacity in the event of a slowdown in the Chinese economy, which could then be dumped onto the global market.

In the textile and apparel sectors, the imminent end of the Multifiber Arrangement (MFA) on January 1, 2005, risks destroying the remaining U.S. textile and apparel industry, which still employs 713,000 people.<sup>36</sup> According to the American Textile Manufacturers Institute, Chinese apparel imports took fifty-three percent of the U.S. market in June 2003, and this share is projected to rise to seventy-five percent in 2004. Moreover, Mexico and the nations of Central America and the Caribbean are projected to lose one million textile and apparel jobs following the removal of MFA quotas, creating great economic distress and possible social and political unrest.<sup>37</sup> Other major textile-producing nations, such as Bangladesh and Sri Lanka also stand to be affected. Similarly, the economic development benefits of the Africa Growth and Opportunity Act stand to be significantly diminished. This outlook is corroborated by a recent study by McKinsey & Company that predicts that China could account for half of the world's clothing and textile exports by 2008, up from 21.6 percent in 2000.<sup>38</sup> These concerns have prompted textile organizations from thirty-one countries to sign the Istanbul Declaration, which requests the WTO to extend the MFA.<sup>39</sup>

The U.S. auto and auto parts industries represent another sector threatened by China's FDI policies. China now intends to speed up efforts to boost automobile and component exports, according to a senior Chinese trade official. Vice-Minister of Commerce, Wei Jianguo, recently stated that the Chinese government has set an export target of U.S. \$70 billion to U.S. \$100 billion a year by 2010.<sup>40</sup> The goal is to make China the component supply center for international auto manufacturers. The government plans to take an active role in boosting production by encouraging FDI and encouraging mergers and acquisitions. Auto parts production will

stimulate vehicle assembly, while vehicle assembly will stimulate parts production.

Finally, the high-technology sector also faces competitive threats from China. Here, Chinese industrial policy is based on the use of government procurement and of proprietary domestic technology standards. Such standards are put in place as a way of compelling technology sharing and as a way of compelling foreign companies to produce in China if they wish to sell in the Chinese market. This issue is more fully explored in Chapter 7.

### **China's Economy: What if the Boom Busts?**

China has enjoyed an economic boom for the past three years, with annual GDP growth steadily accelerating from 7.3 percent in 2001 to 9.1 percent in 2003. Now, there are fears that China's growth may be unsustainable and may even have elements of a bubble. A particular cause of concern has been a rise in consumer inflation, which rose from negative 0.6 percent in 2002 to 1.2 percent in 2003 and is expected to rise further to three percent in 2004.<sup>41</sup>

China's strong growth performance has been driven by two factors. First, there has been a rapid expansion of domestic credit, driven by lending by state-owned banks. In 2003 and the first quarter of 2004, total bank lending rose at an annual rate in excess of twenty percent.<sup>42</sup> Second, there has been rapid export growth, driven by exports of multinational companies located in China. In 2003, total Chinese exports grew by 34.6 percent, and the multinational share of these exports rose to fifty-five percent.<sup>43</sup> The fact that their share increased indicates that export sales of these companies are rising faster than overall Chinese exports.

In light of fears of accelerating inflation and a possible investment bubble, China's economic authorities have recently moved to slow growth by seeking to check the rate of credit expansion. Slowing an economic boom is a difficult task under any circumstances, but China faces special challenges owing to its suspect credit allocation system.

The core problem concerns lending by China's state-owned banks, much of whose lending is driven by political and noncommercial considerations, some with no expectation of repayment. This has two significant negative consequences. First, it means that many loans are likely to end up as nonperforming, which threatens to undermine further the stability of China's banking system. Second, with loans directed on the basis of political and noncommercial criteria, this finance has sometimes been used to accumulate capacity in sectors already in overcapacity. Consequently, there will continue to be inflationary pressures in sectors short of capacity, while there may be deflationary pressures in sectors where unnecessary capacity has been accumulated.

These problems represent major failings of the Chinese development model. Rapid domestic credit expansion can make for strong aggregate demand growth, while multinational company production can generate exports earnings that provide an international financial cushion. However, ultimately, an economy must make productive investments that ensure capital is accumulated in those places

where it is needed and can pay for itself by earning a sufficient rate of return. This calls for market mechanisms.

If China has a significant economic slowdown, the U.S. economy may suffer some collateral damage (as detailed below). Policy-makers should be aware of this possibility, but they should also recognize that this damage is likely to be limited. Moreover, concerns about the effects of a Chinese economic slowdown should not be used as reason to avoid addressing existing significant structural problems in the U.S.-China economic relationship.

- Many commodity-producing developing countries have benefited from higher commodity prices resulting from China's increased demand for resources. A Chinese economic slowdown will cause prices to fall back, thereby lowering the incomes of these producing countries and weakening their demand for U.S. exports. Additionally, many developing countries have borrowed on the back of higher commodity prices, and they may have problems meeting their financial commitments, which could then cause problems in global financial markets. Balanced against this, lowering global commodity and oil prices should lower U.S. inflation and benefit U.S. consumers.
- Given China's high rates of investment, funded by state bank lending, there is the prospect of significant surplus capacity in many Chinese industries. This surplus could find its way onto global markets, driving down prices and creating problems for companies in other countries. The steel industry is an instance where such a scenario could readily occur.
- The quantity of nonperforming loans (NPLs) in the Chinese banking sector could increase significantly. These loans should be a concern for equity market investors, particularly small investors whose retirement wealth is at risk. This is because China plans to sell shares in some of its major state-owned banks, and U.S. investors could significantly overpay by buying into these enterprises without full knowledge of the scale of the NPL problem.
- Finally, a slowdown of Chinese economic growth may be used to deflect attention away from China's undervalued currency. As discussed earlier in the chapter, China has a structural trade surplus with the United States that calls for a significant upward revaluation of the yuan. However, in the event of a domestic economic downturn, Chinese authorities may use the downturn to claim opportunistically that adjustment of the exchange rate is inappropriate, as it would compound the slowdown. In effect, China may try to use its internal economic imbalance to block adjustment of its external economic imbalance, with consequent continuing detrimental impact on U.S. manufacturing.

#### **RECOMMENDATIONS**

*The Commission made additional recommendations on this topic in its transmittal letters to Congress forwarding the record of the Commission's hearings of September 25, 2003, and January 30, 2004, which are attached at appendix II.*

***Recommendations for Dealing with China's Currency Manipulation***

- The 1988 Omnibus Trade and Competitiveness Act requires the Treasury Department to examine whether countries are manipulating their exchange rates for purposes of gaining international competitive advantage. The Treasury is to arrive at its finding in consultation with the IMF, which defines manipulation as “protracted large-scale intervention in one direction in the exchange market.” The Treasury has repeatedly evaded reporting on this test. The Commission recommends that Congress require the Treasury to explicitly address this test in its required report to Congress. Furthermore, a condition for taking action against a country that manipulates its currency is that an offending country be running a material global current account surplus in addition to a bilateral surplus. The Commission recommends that Congress amend this provision so that a material global current account surplus is not a required condition.
- The administration should use all appropriate and available tools at its disposal to address and correct the problem of currency manipulation by China and other East Asian countries. With regard to China, this means bringing about a substantial upward revaluation of the yuan against the dollar. Thereafter, the yuan should be pegged to a trade-weighted basket of currencies, and provisions should be established to guide future adjustments if needed. As part of this process, the Treasury Department should engage in meaningful bilateral negotiation with the Chinese government, and it should also engage in meaningful bilateral negotiations with Japan, Taiwan, and South Korea regarding ending their long-standing exchange rate manipulation. The administration should concurrently encourage our trading partners with similar interests to join in this effort. The Commission recommends that Congress pursue legislative measures that direct the administration to take action—through the WTO or otherwise—to combat China’s exchange rate practices in the event that no concrete progress is forthcoming.

***Recommendations for Addressing China's Mercantilist Industrial and FDI Policies***

- The Commission recommends that Congress direct the United States Trade Representative (USTR) and the Department of Commerce to undertake immediately a comprehensive investigation of China’s system of government subsidies for manufacturing, including tax incentives, preferential access to credit and capital from state-owned financial institutions, subsidized utilities, and investment conditions requiring technology transfers. The investigation should also examine discriminatory consumption credits that shift demand toward Chinese goods, Chinese state-owned banks’ practice of noncommercial-based policy lending to state-owned and other enterprises, and China’s dual pricing system for coal and other energy sources. USTR and Commerce should provide the results of this investigation in a report to Congress that assesses whether any of these practices may be

actionable subsidies under the WTO and lays out specific steps the U.S. government can take to address these practices.

- The Commission recommends that Congress direct the administration to undertake a comprehensive review and reformation of the government's trade enforcement infrastructure in light of the limited efforts that have been directed at enforcing our trade laws. Such a review should include consideration of a proposal by Senator Ernest Hollings (D-SC) to establish an assistant attorney general for international trade enforcement in the Department of Justice to enhance our capacity to enforce our trade laws. Moreover, the U.S. government needs to place an emphasis on enforcement of international labor standards and appropriate environmental standards.
- The Commission recommends that Congress direct the administration to work with other interested WTO members to convene an emergency session of the WTO governing body to extend the MFA at least through 2008 to provide additional time for impacted industries to adjust to surges in imports from China.

#### ENDNOTES

1. The figure of \$535.5 billion is based on customs data collected by the Foreign Trade Division of the U.S. Census Bureau. For national income accounts purposes, these data are adjusted for certain transactions, and the deficit in 2003 came to \$549.1 billion. Source: *U.S. International Trade in Goods and Services January 2004* (U.S. Department of Commerce, March 2004).

2. Commission's calculation using data from the U.S. Census Bureau and U.S.-China Business Council.

3. Dr. Charles W. McMillion, briefing paper prepared for The U.S.-China Economic and Security Review Commission, January 30, 2004, p. 2.

4. Sources: Ernest H. Preeg, *The Growing U.S. Trade Deficit in Advanced Technology Products (ATP)* (Arlington, VA: Manufacturers Alliance/MAPI, March 2004), and data provided by Charles McMillion, MBG Information Services, Washington, DC.

5. The euro closed at 0.89 per dollar on December 31, 2001. Source: Board of Governors of the Federal Reserve, <http://www.federalreserve.gov/releases/h10/hist/>.

6. In December 2002, total employment was 130,096,000. In December 2003, it was 130,035,000. Source: Bureau of Labor Statistics, <http://stats.bls.gov/ces/cesbtabs.htm>.

7. The brief cyclical recovery that began in July 1980 is excluded, as it lasted just twelve months and is not representative of a full cycle.

8. Source: Bureau of Labor Statistics, <http://data.bls.gov/sevlet/surveyoutputServlet>.

9. Based on unpublished data from the Economic Policy Institute, as summarized in Robert E. Scott, "China and the States: Booming Trade Deficit with China will Accelerate Job Destruction in Next Decade with Losses in Every State," issue brief (Washington, DC: Economic Policy Institute, May 2000).

10. J. Bivens, "Shifting Blame For Manufacturing Job Loss" (briefing paper, Washington, DC: Economic Policy Institute, 2004), p. 2.

11. Remarks at the Detroit Economic Club, September 15, 2003, [http://www.commerce.gov/opa/speeches/Evans/2003/Sept\\_15\\_Evans\\_manufacturing\\_Detroit.htm](http://www.commerce.gov/opa/speeches/Evans/2003/Sept_15_Evans_manufacturing_Detroit.htm).

12. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment and Exchange Rate Policies: Impact on the United States*, testimony of Ernest H. Preeg, "Chinese Currency Manipulation and the U.S. Trade Deficit," September 25, 2003, p. 74.

13. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment, and Exchange Rate Policies: Impact on the United States*, testimony of Franklin J. Vargo on behalf of the National Association of Manufacturers, September 25, 2003, p. 178.

14. The study was prepared by Dr. Joel Popkin, former Council of Economic Advisors member, and is referred to in the testimony of Franklin J. Vargo. See record of the Commission's hearing held September 25, 2003, p. 178.

15. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment, and Exchange Rate Policies: Impact on the United States*, September 25, 2003, p. 178.

16. *The Overvalued Dollar and the Danger to Economic Recovery*, a report submitted as part of the testimony of Richard L. Trumka, secretary-treasurer, AFL-CIO, before the Senate Committee on Banking, Housing, and Urban Affairs, May 1, 2002.

17. "Wu Says U.S., China Agree to Dialogue on Measuring the U.S. Trade Deficit," *Inside U.S.-China Trade*, vol. 4, no. 17 (April 28, 2004): p. 6.

18. "Wu Says U.S., China Agree," p. 1.

19. These effects are documented in R.A. Blecker, "Exchange Rates in North America: Effects of the Over-valued Dollar on Domestic U.S. Manufacturing and Implications for Canada and Mexico," paper presented for the conference "Can Canada and Its NAFTA Partners Conduct Independent Macroeconomic Policies in a Globalized World?" (Ottawa, Canada: University of Ottawa, September 20-21, 2002), and "Overvalued Dollar Puts Hundreds of Thousands Out of Work," (Washington, DC: National Association of Manufacturers, March 2002).

20. Based on figures in figure 1.2 of the Bureau of Economic Analysis's "Gross Domestic Product: Fourth Quarter 2003" release, March 25, 2004.

21. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment, and Exchange Rate Policies: Impact on the United States*, September 25, 2003, p. 220.

22. A recent study confirming the importance of the exchange rate for agriculture is M. Kim and W. Koo, "How Differently Do the Agricultural and Industrial Sectors Respond to Exchange Rate Fluctuation?" (Agribusiness & Applied Economics Report no. 482 (Fargo, North Dakota: North Dakota State University, Center for Agricultural Policy and Trade Studies, June 2002).

23. C.E. Hart, "U.S. Agriculture and the Value of the Dollar," Iowa Ag Review Online, summer 2003 (9.3), [www.card.iastate.edu/iowa\\_ag\\_review/summer\\_03](http://www.card.iastate.edu/iowa_ag_review/summer_03).

24. The Institute for International Economics, Washington, DC, published in February 2003 the proceedings of a conference titled *Dollar Overvaluation and the World Economy*. The proceedings document the dollar's overvaluation and the negative economic consequences.

25. Dr. C. Fred Bergsten of the Institute for International Economics estimated China's currency to be under-valued by between twenty and twenty-five percent. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment, and Exchange Rate Policies: Impact on the United States*, September 25, 2003, p. 44. Franklin J. Vargo of the National Association of Manufacturers mentions estimates of under-valuation ranging as high as forty percent: U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment, and Exchange Rate Policies: Impact on the United States*, September 25, 2003, p. 175.

26. China's fast economic growth has recently caused it to move officially into trade deficit. However, this deficit is small, and the fact that it is so small despite a nine percent growth rate, is indicative of the extent of undervaluation.

27. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment and Exchange Rate Policies: Impact on the United States*, testimony of Ernest H. Preeg, September 25, 2003, p. 74.

28. "Double Surplus Situation to Maintain Stability of RMB Exchange Rate: Official," *People's Daily Online*, <http://english.peopledaily.com.cn>.

29. Source: International Monetary Fund, International Financial Statistics, April 2004, <http://www.imf.org/eng/Statistics/engHome>.

30. Material in this section is substantially based on the written statement provided to the U.S.-China Economic Security and Review Commission by Ernest H. Preeg. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment, and Exchange Rate Policies: Impact on the United States*, September 25, 2003, pp. 72-6.

31. *Report to Congress on International Economic and Exchange Rate Policies*, (Washington, DC: U.S. Department of the Treasury, April 15, 2004), p. 1.

32. Source: *IMF Financial Statistics*.

33. Source: *World Investment Report, 2003* (New York and Geneva, Switzerland: United Nations, United Nations Conference on Trade and Development, 2003).

34. Source: U.S.-China Business Council, <http://www.uschina.org/statistics/fdi1979-03.html>.

35. See prepared statement of Kathleen A. Walsh, senior associate, The Henry L. Stimson Center, U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment, and Exchange Rate Policies: Impact on the United States*, September 25, 2003, pp. 149-50.

36. Source: Commission's calculations using data from the Bureau of Labor Statistics, <http://data.bls.gov/>

37. These figures are contained in the report *The China Threat to World Textile and Apparel Trade* issued by the American Textile Manufacturers Institute and printed in the record of the Commission's hearing *China's Impact on the U.S. Manufacturing Base* held on January 30, 2004, pp. 49–58.

38. Cited in "China's Rivals in Asia Unprepared for End of Textile Quotas," *AFX News Limited*, March 28, 2004.

39. There were thirty-one signatories as of April 14, 2004.

40. See "Auto Exports to Get Strong Stimulus," *China Daily*, April 5, 2004.

41. All data are from the *Asian Development Outlook, 2004*, (Washington, DC: Asian Development Bank).

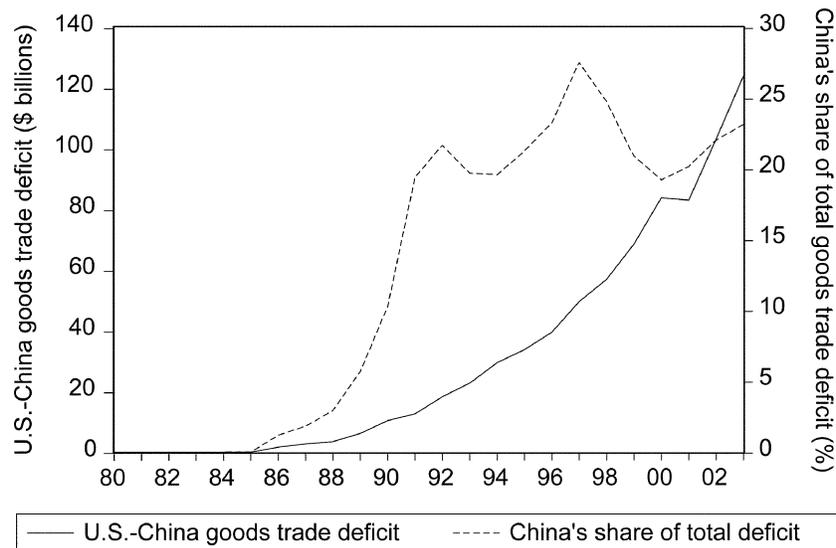
42. "Headed for a Crisis?" *Business Week*, May 3, 2004.

43. Data on total export growth are from the *Asian Development Outlook, 2004*. Data on the multinational export share are from a presentation, *Chinese Economy*, by Nicholas Lardy, senior fellow, Institute for International Economics, Washington, DC.

**Figure 1.1 U.S. balance of goods trade by region for 2003**

	<b>Balance (\$ billions)</b>	<b>% of Total</b>
<b>Total (census basis)</b>	<b>−\$535.5</b>	<b>100.0%</b>
<b>North America</b>	<b>−95.0</b>	<b>17.8</b>
Canada	−54.5	10.2
Mexico	−40.6	7.6
<b>Western Europe</b>	<b>−101.3</b>	<b>18.9</b>
Euro area	−75.4	14.1
<b>Pacific Rim</b>	<b>−230.0</b>	<b>43.0</b>
Japan	−66.0	12.3
China	−124.0	23.2
<b>OPEC</b>	<b>−51.0</b>	<b>9.5</b>
<b>Rest of the World</b>	<b>−57.9</b>	<b>10.8</b>

Legend: OPEC = Organization of Petroleum Exporting Countries  
Sources: Bureau of Economic Analysis and Commission's calculations.

**Figure 1.2 U.S.-China goods trade deficit and China's share of the total U.S. goods trade deficit, 1980–2003**

Source: U.S. Census Bureau, Foreign Trade Division.

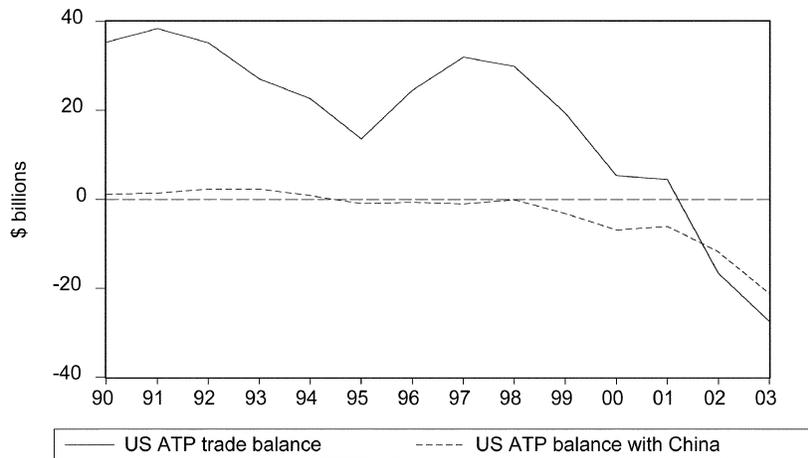
**Figure 1.3 Comparison of scale of imbalance of the U.S. trade deficit by country import/export ratios, 2001–2003**

Country	2001	2002	2003
China	5.32	5.66	5.36
Canada	1.33	1.30	1.32
Mexico	1.29	1.38	1.42
EU-15	1.38	1.57	1.63
Japan	2.20	2.20	2.27

Legend: EU = European Union

Sources: Bureau of Economic Analysis and Commission's calculations.

**Figure 1.4 U.S. ATP trade balance and U.S. ATP trade balance with China, 1990–2003**



Source: Data supplied by Charles McMillion, MBG Information Services and data in *The Threatened U.S. Competitive Lead in Advanced Technology Products (ATP)* (Arlington, VA: Manufacturers Alliance/MAPI, March 2004).

**Figure 1.5 Changes in major currency dollar exchange rates, January 2, 2002–April 30, 2004**

	January 2, 2002	April 30, 2002	% Change
Euro	0.90	1.20	33.3%
Japanese yen	132.02	110.37	16.4%
Canadian dollar	1.60	1.37	14.4%
Chinese yuan	8.28	8.28	0.0%

Sources: Board of Governors of the Federal Reserve and Commission's calculations.

**Figure 1.6 Percentage change in total private and manufacturing employment two years into business cycle economic recovery**

	<b>% Change Private Employment</b>	<b>% Change Manufacturing Employment</b>
<b>Oct 1949–Oct 1951</b>	12.00%	16.20%
<b>May 1954–May 1956</b>	7.10	6.10
<b>Apr 1958–Apr 1960</b>	7.20	7.90
<b>Feb 1961–Feb 1963</b>	4.50	5.00
<b>Nov 1970–Nov 1972</b>	6.50	5.80
<b>Mar 1975–Mar 1977</b>	7.20	7.50
<b>Nov 1982–Nov 1984</b>	9.40	7.70
<b>Mar 1991–Mar 1993</b>	1.10	–2.00
<b>Nov 2001–Nov 2003</b>	–1.00	–9.30

Source: Commission's calculations based on Bureau of Labor Statistics data.

**Figure 1.7 Annual Official Chinese, Japanese, Taiwanese, and South Korean Foreign Exchange Purchases (\$ billions)**

<b>Year</b>	<b>China</b>	<b>Japan</b>	<b>Taiwan</b>	<b>S. Korea</b>
2000–01	\$46.6	\$40.5	\$15.5	\$6.6
2001–02	74.2	63.7	39.4	18.3
2002–03	116.8	201.3	45.0	33.7

Source: *IMF Financial Statistics* and Commission's calculations.



**CHAPTER 2**  
**CHINA IN THE WORLD TRADE**  
**ORGANIZATION: COMPLIANCE, MONITORING,**  
**AND ENFORCEMENT**

**“WORLD TRADE ORGANIZATION COMPLIANCE.**  
*The Commission shall review China’s record of compliance to date with its accession agreement to the WTO, and explore what incentives and policy initiatives should be pursued to promote further compliance by China.”* [P.L. 108–7, Division P, Sec. 2(c)(2)(H)]

**KEY FINDINGS**

- China has made some progress in formally meeting its WTO accession commitments, but compliance shortfalls persist in a number of areas of key importance to the United States. While China has generally reduced tariffs in accordance with its accession commitments, it still maintains nontariff barriers and is erecting new nontariff barriers that harm U.S. interests by effectively limiting market access for U.S. goods and services.
- China continues to tolerate rampant piracy of copyrighted U.S. material, with rates running above ninety percent across all copyright industries for 2003.<sup>1</sup> This will cost U.S. industries an estimated \$2.6 billion in lost profits in 2004.<sup>2</sup>
- U.S. companies are sometimes forced to transfer technology to Chinese partners as a condition in business deals. The Chinese government violates its WTO obligations when it expressly requires technology transfers as a condition of doing business. It is also able to compel such transfers through use of its regulatory powers as well as its extensive role in the economy. These technology transfers pose substantial economic and security concerns for the United States.
- China has frustrated the effectiveness of the WTO’s Transitional Review Mechanism (TRM), thereby preventing it from becoming a robust mechanism for assessing China’s compliance and for placing multilateral pressure on China to address shortfalls. The TRM is a central element of China’s WTO accession arrangement, and its failure to perform as intended is a serious policy concern that demands attention. China has taken deliberate actions to make the TRM process meaningless and thus must ultimately bear the blame for the TRM’s failure. However, the United States and other WTO members are also at fault for allowing the marginalization of the TRM.
- The U.S. government has established mechanisms for monitoring China’s WTO compliance but has not been sufficiently vigorous in enforcing U.S. trading rights under U.S. and international trade laws. This insufficient enforcement may dissuade U.S.

businesses from filing trade complaints or safeguard requests, making the use of such measures even less likely. Other potential trade remedies against unfair trade practices, such as countervailing duties, are not being applied to China despite requests by U.S. companies.

#### OVERVIEW

China was not a market-based economy at the time of its accession to the WTO nor is it now. Because the structures of the WTO rely on the functioning of market-based economies, China's accession required a unique agreement allowing China's early entry in exchange for firm commitments to implement a broad range of legal and regulatory reforms as well as tariff reductions. China also agreed to special safeguard mechanisms that other WTO members could utilize to protect domestic industries significantly injured by surges of imports from China's nonmarket economy. Assuring that China implements its WTO commitments is a large and important task for the U.S. government.

Given the complexity and significance of China's WTO commitments, both the U.S. government and the WTO have established monitoring processes to assess China's compliance progress. At the multilateral level, the WTO's TRM is the central monitoring mechanism. The monitoring systems were also intended to serve as early warning indicators allowing parties to resolve potential disputes. However, they have had only mixed results in this regard.

The focus of the Commission's work in this area has been evaluating the record of China's compliance with its WTO commitments, investigating possible avenues by which the United States can encourage and facilitate improvement in Chinese compliance, and assessing the effectiveness of WTO and U.S. processes for compliance monitoring and enforcement.

The Commission held a hearing on these topics on February 5, 2004. The hearing featured executive branch officials; trade law experts; and representatives of agriculture, business, industry, and labor organizations.

Further, the Commission contracted with the Washington, DC, law firm Stewart and Stewart to produce a comprehensive report, *China's Compliance with World Trade Organization Obligations: A Review of China's 1st Two Years of Membership*. This project is a follow-up to Stewart's April 30, 2002 report for the Commission, *Accession of the People's Republic of China to the World Trade Organization: Baseline of Commitments, Initial Implementation and Implications for U.S.-PRC [People's Republic of China] Trade Relations and U.S. Security Interests*.

A Commission delegation undertook a fact-finding mission to the WTO's Geneva headquarters in December 2003 to discuss with WTO officials, U.S. officials, and representatives of other member countries their perspectives on China's first two years of membership in the WTO. The effectiveness of the TRM process was another central topic of discussion.

## ANALYSIS AND FINDINGS

### **Transitional Review Mechanism Proves Ineffective**

As part of its accession agreement, China agreed to be subject to the TRM, a multilateral annual review of China's compliance with its WTO obligations. The TRM is scheduled to produce annual written reports for the first eight years of China's WTO membership, with a final report after the tenth year. It has produced two reports to date.

Congress specifically sought the TRM as part of China's accession agreement, in part because U.S. negotiators expected the TRM to be a robust mechanism for monitoring China's WTO compliance and applying multilateral pressure for improvement.<sup>3</sup> Because the United States was assenting to China's entry into the WTO before its economic and regulatory systems were consistent with WTO norms—i.e., before China had become a fully developed market economy—the United States sought a method for accurately measuring China's implementation of WTO commitments as well as a process for encouraging China's compliance with its obligations. In practice, the TRM has been undermined by China's refusal to abide by standard WTO procedural norms. For instance, China has generally refused to respond in writing to requests for information from other member countries as part of the process. China has also resisted WTO member efforts to have TRM issues raised in WTO subsidiary committee meetings at a sufficiently early stage to have a meaningful dialogue regarding member concerns.

In its report on U.S. efforts to monitor China's WTO compliance, the U.S. General Accounting Office (GAO) concluded: "The TRM process fell short of the meaningful review hoped for by U.S. and other country officials. U.S. government officials agreed that the TRM process would have worked better if there had been greater consensus from WTO members on their expectations regarding China's actions."<sup>4</sup>

China argues that the normal customs of the WTO do not apply, because the TRM is a discriminatory measure applying only to China. The Commission notes that China's entry into the WTO was conditioned on China's acceptance of the TRM and other provisions intended to compensate for the disjunction between WTO standards and China's nonmarket economy. China is therefore obligated to participate in the TRM in good faith, notwithstanding the TRM's application solely to China.

U.S. trade representatives urged China to cooperate more fully following the first TRM report cycle. After experiencing similar noncooperation during the second report cycle, however, the Commission understands that U.S. officials opted not to press the issue on the grounds of hoped-for progress in bilateral dialogue. The Commission expresses deep skepticism regarding such an approach and believes that U.S. officials should press to make the multilateral TRM process more effective.

The Commission is also concerned about the minimal coordination that exists between the United States and other major trading partners regarding China's compliance. The European Union (EU), Japan, and others have not worked together to formulate a joint

strategy. Instead, they appear to be waiting for the United States to challenge China on its failings.

## **China's Compliance Record**

### ***China's Obligations***

As part of its accession agreement, China was obligated to implement the following salient measures by December 11, 2003:

- Reduce tariffs on most imported goods to rates bound by the WTO accession agreement—this commitment has generally been fulfilled according to schedule.<sup>5</sup>
- Grant full trading rights—the right to import and export—to foreign minority- and majority-owned joint ventures—despite some changes in regulations, this commitment has not been fulfilled.<sup>6</sup>
- Grant distribution rights to foreign minority- and majority-owned joint ventures—this commitment has not been fulfilled.
- Ease geographic restrictions on operations of foreign financial services companies—this commitment has been fulfilled according to schedule.
- Implement a transparent tariff-rate quota (TRQ) system in certain agricultural products—some improvements were made, but problems remain with the nature and transparency of TRQ regulations.
- Permit foreign majority ownership in joint venture retail enterprises and open a number of additional cities to retail joint ventures—this commitment was only partially fulfilled, with foreign investment still problematic in some sectors.
- Permit the use of commission agents for the sale and distribution of the products of foreign majority-owned entities—this commitment has been partially fulfilled, with restrictions remaining.
- Allow foreign majority ownership, and place no geographic or quantitative restrictions on foreign service suppliers of most imported and domestically produced products—this commitment has been fulfilled.<sup>7</sup>

Further commitments to reduce or eliminate barriers to trade, particularly in the area of trade in services, are due to be implemented by December 11, 2004. These commitments relate to such services as commission agents' services, franchising, wholesale and retail operations, telecommunication, banking, insurance, and securities.

### ***China's Compliance Shortfalls***

In a series of reports, the executive branch has documented in detail the extent to which China has complied with its accession obligations and other applicable WTO standards. Moreover, Congress has directed the GAO to conduct a multiyear, comprehensive assessment of China's compliance record and U.S. monitoring and enforcement efforts.<sup>8</sup> China has completed a broad range of tariff reductions and legal revisions in accordance with its accession agreement. It has also improved its tariff-rate quota system for agricultural imports and somewhat reduced capitalization requirements for financial service operations.

However, China has also erected new barriers to trade. Additionally, a number of key unaddressed compliance shortfalls continue to significantly impede U.S. trade with China, such as:<sup>9</sup>

- continued direct and indirect subsidies to Chinese producers, including preferred and sometimes unserviced loans from state-owned banks, and free or discounted utility services;<sup>10</sup>
- rampant abuse and lax enforcement of intellectual property rights;<sup>11</sup>
- poor transparency in adopting and applying regulations;<sup>12</sup>
- the use of unjustified safety standards to exclude foreign products—including non-science-based sanitary and phytosanitary (SPS) standards on agricultural products and the China Compulsory Certification of safety;<sup>13</sup>
- the use of unjustified technical standards to exclude foreign products or force foreign producers into joint ventures with Chinese firms for production aimed at the Chinese market;<sup>14</sup>
- denial of equal tax treatment to foreign products;<sup>15</sup>
- barriers to specific services, such as financial services and express couriers;<sup>16</sup>
- obstacles to domestic distribution of products by foreign companies, which severely curtails the ability of foreign companies to gain market share and forces them to sacrifice control over portions of the profit margin;<sup>17</sup> and
- forced transfers of technology in return for market access or other regulatory approval.

The Commission is particularly concerned about instances in which transfers of technology are required by the Chinese government or state-owned and state-invested enterprises as a condition of establishing a business presence in China. Prior to China's accession, forced technology transfers were a customary part of doing business in China. China agreed to end the practice of government-forced transfers as part of its accession commitments, but the Commission understands that the practice continues.<sup>18</sup> One less direct method for inducing technology transfers is China's use of its licensing power in coordination with its state-owned enterprises to organize bargaining cartels in technology markets.<sup>19</sup> Additionally, because the Chinese government remains extensively involved in the economy, it is in a position to exert pressure toward technology transfers beyond the effects of normal government functions. For example, if a Chinese state-owned or state-invested enterprise requested a technology transfer as a condition of a business deal, the U.S. company involved may be informally told that its broader business dealings in China will be impacted by a refusal to accept this condition. Though it is only a violation of China's WTO obligations if technology transfers are an express condition of the Chinese government for doing business, the Commission is concerned with the cumulative effects on U.S. economic security wrought by transfers of U.S. technology to China.

### ***Reports on Compliance Concur on China's Inadequate Record***

U.S. officials, business groups, and analysts have commented on China's mixed compliance record. In 2002–03, agencies of the U.S.

government, the WTO, and a number of U.S. business organizations published studies and submitted testimony assessing China's compliance. The picture that emerges from these reports is that China's record of compliance in its second year in the WTO remains inadequate.

USTR's December 11, 2003, annual report to Congress on China's WTO compliance identified areas in which China had made progress in tariff reduction and implementing certain services and agricultural trade commitments, but concluded:

*Despite these gains, 2003 also proved to be a year in which China's WTO implementation efforts lost a significant amount of momentum. In a number of different sectors, including some key sectors of economic importance to the United States, China fell far short of implementing its WTO commitments. . . . [I]nstitutionalization of market mechanisms still remains incomplete, and intervention by Chinese government officials in the market is common.*

The USTR report highlighted the following concerns as of the second-year anniversary of China's WTO accession:

#### *Agriculture*

- unreasonable rules on biotechnology, notably in the case of soybeans
- questionable sanitary and phytosanitary measures
- apparent use of agricultural subsidies to promote exports
- improper administration of TRQs for bulk agricultural commodities

#### *Intellectual Property Rights*

- rampant piracy of film, music, publishing, and software products
- infringements of pharmaceutical, chemical, infotech, and other patents
- counterfeiting of consumer goods, electrical equipment, automotive parts, and industrial products

#### *Services*

- transparency problems
- excessive capitalization requirements for foreign financial services companies
- regulatory discrimination in express delivery services
- requirements for insurance companies to form subsidiaries in order to establish branches

#### *Value-added Tax (VAT)*

- VAT policies that encourage domestic production over imports in a number of industrial and agricultural sectors
- VAT rebates to domestic semiconductor and fertilizer exporters that disadvantage U.S. exports to China—and third markets—of these products

*Transparency*

- uncertainty, lack of uniformity in inviting public comment on draft laws and regulations and providing WTO enquiry points

*Trading Rights and Distribution Services*

- partial implementation of commitments required to be phased in over first three years of WTO membership.

U.S. business groups that lobbied hard in favor of granting Permanent Normal Trade Relations (PNTR) status to China in 1999-2000, and applauded China's entry into the WTO, are now expressing concerns over the pace and scope of compliance. The U.S.-China Business Council, in a recent article, concludes:

*... two years into China's WTO membership, the PRC government has been slow to implement its most significant commitments, and no progress has been made in some important areas. China has fallen into a pattern of renegotiating its WTO entry terms line by line as questions arise about implementation problems. China's interpretations of certain WTO terms violate the spirit, if not the letter, of its commitments, and new barriers China has erected in some areas make matters worse. ...*<sup>20</sup>

The American Chamber of Commerce in China writes in its 2003 White Paper:

*... there is increasing dissatisfaction with the slow pace of implementing some of China's WTO commitments. As detailed in the relevant sections of this White Paper, there has been little progress in sensitive areas such as financial services, agriculture, and distribution. It should therefore be no surprise that American firms express greater dissatisfaction with WTO implementation than was the case last year, and a higher degree of skepticism about the intentions of the Chinese government.*<sup>21</sup>

The U.S. Chamber of Commerce has called China's WTO compliance "uneven and incomplete," noting further that

*[u]nless this picture improves, there will be an increasing crescendo of complaints about China's record. A number of companies already publicly express the view that China is dismissive of global trade rules and commitments. ... [W]e have not seen enough new contracts, new access, and new customers to stem this tide.*<sup>22</sup>

The National Association of Manufacturers says its members

*want the United States to have a positive trade relationship with China. However, they also want a level playing field for competition. In that regard, we are hearing increasing concerns about unfair Chinese trade and currency practices and China's failure to provide the same kind of access to U.S. goods and services in the Chinese market that Chinese goods and services enjoy in the U.S. market.*<sup>23</sup>

In sum, the Commission finds that though China has made progress regarding its accession obligations, significant gaps remain between commitments and practices. The Commission is concerned about these gaps for two reasons. First, they are affecting access to China's market for U.S. exports. Second, they augur poor implementation of remaining Chinese accession commitments that come due over the next few years.

### **Combating China's Compliance Shortfalls**

The United States has responded to China's compliance shortfalls in four ways. First, it has made modest use of the trade enforcement mechanisms contained in China's accession agreement. Second, it has provided technical assistance to China to improve its implementation of WTO commitments. Third, it has engaged in bilateral dialogue to encourage voluntary reform. Finally, it has filed one WTO dispute against China. Overall, however, the U.S. government has not been sufficiently vigorous in addressing China's compliance problems.

### ***China-Specific Safeguards Remain Underutilized***

China's WTO accession agreement included several important safeguards that other WTO members could utilize to protect against surges of Chinese imports following China's entrance into the WTO. These safeguards are not designed to address compliance shortfalls. Rather, they recognize that nonmarket economies lack the necessary mechanisms to adjust production levels in response to changing market conditions. As a result, such economies have a tendency to flood overseas markets with the output from overproduction.<sup>24</sup> The safeguards against import surges were a key aspect of the WTO deal that ultimately made China's accession acceptable to U.S. negotiators and to the U.S. Congress.

- (1) The accession agreement allows WTO members to activate a safeguard against specific products imported from China when they cause a "market disruption" in the domestic market. The United States established a procedure for activating this safeguard under section 421 of the Trade Act of 1974. Cases are examined by the International Trade Commission (ITC), which in turn sends a report and recommendation to the president, who can reject an ITC ruling in favor of implementing a safeguard only on national or economic security grounds.<sup>25</sup> This safeguard is available through 2013.
- (2) In addition to the product-specific safeguard implemented through section 421, China's accession agreement provided WTO members with a special safeguard against market disruptions from Chinese textile imports. Activating the textile safeguard allows the United States to impose a limit of 7.5 percent on the growth of the offending category of imports from China. The textile safeguard can be activated for one-year periods and is available through 2008.

The United States has made only limited use of the available China-specific safeguards. One instance is the activation of textile safeguards in November 2003 on a limited range of products imported from China. Chinese imports in these textile categories,

which account for only five percent of textile imports from China, are currently subject to a one-year growth cap of 7.5 percent.<sup>26</sup> However, the U.S. government has failed to use these safeguards more broadly and did not even publish procedures for implementing the textile safeguard until May 2003, seventeen months after China's WTO entry—a delay that helps to explain the limited use of safeguards but also suggests policy inattention.<sup>27</sup> The textile safeguard will become increasingly important with the termination of the multilateral Multifiber Arrangement (MFA) at the end of 2004. The potential consequences of the imminent end of the MFA are discussed in Chapter 1.

The poor record of the United States on section 421 cases is detailed in figure 2.1. To date, the ITC has reached a determination in five cases and made three affirmative findings with accompanying proposed remedies.<sup>28</sup> The president has rejected each of the affirmative findings. The statute permits such a rejection only if broader national economic or security interests are cited.<sup>29</sup> Affirmative findings by the ITC in section 421 cases were intended to apply presumptively, thereby making the process an important tool for protecting against market disruption.<sup>30</sup> The Commission is now concerned that the effectiveness of the safeguards has been undermined by repeated presidential rejection of trade remedies in section 421 cases. Companies and organizations may cease to file legitimate petitions, given the significant legal costs associated, if they come to believe that even strong cases will be categorically rejected.

The Commission is concerned with the possibility that U.S. petitioners may have been given less access to government decision-makers on safeguard cases than Chinese respondents. The Chinese government has hired U.S. law and government relations firms to lobby the executive branch during consideration of safeguard requests.<sup>31</sup> Representatives of petitioning U.S. firms allege that they were denied similar access granted to China's interlocutors.<sup>32</sup> USTR has denied that section 421 petitioners had insufficient input or access to the executive branch during the process.<sup>33</sup>

**Figure 2.1 Section 421 Investigations by the U.S. International Trade Commission**

Product	Investigation Initiated	ITC Vote on Market Disruption	ITC Recommendation	President's Response
Pedestal actuators	August 19, 2002	Affirmative; 3-2	Relief through quotas	Rejected recommendation on grounds of national economic interest <sup>34</sup>
Steel wire garment hangers	November 27, 2002	Affirmative; 5-0	Relief through additional duties	Rejected recommendation on grounds of national economic interest

**Figure 2.1 Section 421 Investigations by the U.S. International Trade Commission—Continued**

Product	Investigation Initiated	ITC Vote on Market Disruption	ITC Recommendation	President's Response
Brake drums and rotors	June 6, 2003	Negative; 5-0	Not applicable	Not applicable
Ductile iron waterworks fittings	September 5, 2003	Affirmative; 6-0	Relief through a 3-year tariff-rate quota	Rejected recommendation on grounds of national economic interest
Innersprings	January 6, 2004	Negative; 6-0	Not applicable	Not applicable

Source: Information derived from Stewart, *China's Compliance with World Trade Organization Obligations*, pp. 230-35.

### ***Cooperative Efforts to Encourage Compliance***

An example of technical assistance is the Department of Commerce's seminar program that educates Chinese officials about internationally accepted standards and the process for setting standards.<sup>35</sup> A 2001 U.S. government survey found nearly thirty federal departments and agencies engaged in capacity building in China.<sup>36</sup> However, the Commission has been unable to determine if these programs have been effective.

With regard to bilateral trade dialogues, the Commission suggested in its 2002 Report to Congress that U.S. trade negotiators deal with Chinese counterparts at the state council rather than the ministerial level and is pleased to see that trade dialogues are now taking place at this level. The United States continues to utilize the U.S.-China Joint Commission on Commerce and Trade (JCCT). China has elevated the level of JCCT talks by sending Vice Premier Wu Yi to the April 21-22, 2004, meetings. In addition to other ad hoc formal and informal meetings, the United States established the Trade Dialogue in February 2003, which brings together U.S. agencies and Chinese ministries.<sup>37</sup>

China made several important promises at the April 21-22, 2004, JCCT meeting. If indefinitely postponed plans to implement its own wireless Internet standard, which would have acted as a barrier to trade and a mechanism for coercing U.S. companies to transfer proprietary technology. China also pledged to improve its enforcement of intellectual property rights (IPR) and to institute the next stage of market access reforms, as laid out in China's WTO accession agreement, six months ahead of schedule. The Commission notes these promises but remains skeptical in light of similar, unfulfilled promises in the past, particularly in the area of IPR protections. The Commission also notes that a number of important U.S. concerns were not included on the JCCT agenda, including China's exchange rate and labor practices and widespread subsidization of export industries.

The U.S. government has also recently made several organizational changes to address its growing concerns with China's trade

practices. USTR has established a new Office of China Affairs to “lead USTR’s effort to make sure the United States has fair and open access to China’s markets.”<sup>38</sup> The Treasury Department appointed Ambassador Paul Speltz to the position of economic and financial emissary to China.<sup>39</sup> The Commission hopes these changes will allow the government to better manage the U.S. response to addressing trade concerns with China.

### ***The United States Files First WTO Dispute***

The United States filed its first WTO dispute against China in March 2004 challenging its value-added tax on semiconductors, and the European Union and Japan joined the case as coplaintiffs in April 2004. China maintains a seventeen percent value-added tax on semiconductors but provides a rebate for sales of domestically designed and manufactured semiconductors, making the effective domestic tax rate three percent. Foreign-designed but domestically manufactured semiconductors are subject to an effective tax rate of six percent. China maintains these differential tax rates in order to force leading-edge semiconductor manufacturers to move production to China.<sup>40</sup> The United States believes that this practice violates the WTO’s national treatment principle and has entered into formal consultations with China as the first step in its WTO dispute. Informal consultations on the issue have been held since China’s accession, but they have ultimately proved fruitless due to China’s contention that its practices are WTO-consistent. How China responds to this case is an important test of China’s membership, and other WTO members appear to have been waiting for the United States to take the lead in confronting Chinese trade practices.<sup>41</sup>

The Commission believes that the United States has not pursued its trade rights sufficiently aggressively under either the WTO or domestic trade laws and that the time for restraint and forbearance has passed.

In addition to more vigorous application of China-specific safeguards and use of the WTO dispute resolution mechanisms, the United States should consider new options for inducing improvement in China’s trade practices. One option is to adjust U.S. practices or statutes to allow countervailing duties to be levied against nonmarket economies. The Department of Commerce currently labels China a nonmarket economy, a classification that U.S. negotiators worked hard to maintain during China’s accession process. Under existing Commerce rules, countervailing duties cannot be applied to nonmarket economies. The Department of Commerce can change this rule and make countervailing duties applicable to nonmarket economies without affecting China’s nonmarket status in antidumping cases.<sup>42</sup> If Commerce declines to do so, Congress should legislate the applicability of countervailing duties to China. Countervailing duties are an important tool for the protection of domestic industry from subsidized imports.

The U.S. government has still other important trade law remedies for combating unfair Chinese trade practices. For instance, the AFL-CIO filed a petition in March 2004 asking USTR to initiate a section 301 investigation of China’s labor practices.<sup>43</sup> The petition could have triggered a USTR investigation to determine if

China's labor practices are "unjustifiable and burden or restrict United States commerce." Section 301 of the 1974 Trade Act grants USTR the capacity under U.S. trade law to impose punitive measures in an effort to correct unfair trading practices of U.S. trade partners.<sup>44</sup> In April 2004, USTR refused to investigate China's labor practices, claiming that the United States would achieve better results with the administration's strategy of utilizing negotiations and more selective use of enforcement mechanisms.<sup>45</sup>

### RECOMMENDATIONS

*The Commission made additional recommendations on this topic in its transmittal letters to Congress forwarding the record of the Commission's hearings of September 25, 2003, and February 5, 2004, which are attached at appendix II.*

- The Commission recommends that Congress press the administration to make more use of the WTO dispute settlement mechanism and/or U.S. trade laws to redress unfair Chinese trade practices. In particular, the administration should act promptly to address China's exchange rate manipulation, denial of trading and distribution rights, lack of IPR protection, objectionable labor standards, and subsidies to export industries. In pursuing these cases, Congress should encourage USTR to consult with trading partners who have mutual interests at the outset of each new trade dispute with China.
- The Commission recommends that Congress press the administration to make better use of the China-specific section 421 and textile safeguards negotiated as part of China's WTO accession agreement to give relief to U.S. industries especially hard hit by surges in imports from China.
- Notwithstanding China's commitments at the April 2004 JCCT meeting, the Commission recommends that Congress press the administration to file a WTO dispute on the matter of China's failure to protect intellectual property rights. China's WTO obligation to protect intellectual property rights demands not only that China promulgate appropriate legislation and regulations, including enacting credible criminal penalties, but also that these rules be enforced. China has repeatedly promised, over many years, to take significant action. Follow-through and action have been limited and, therefore, the Commission believes that immediate U.S. action is warranted.
- The Commission recommends that Congress urge the Department of Commerce to make countervailing duty laws applicable to nonmarket economies. If Commerce does not do so, Congress should pass legislation to achieve the same effect. U.S. policy currently prevents application of countervailing duty laws to non-market economy countries such as China. This limits the ability of the United States to combat China's extensive use of subsidies that give Chinese companies an unfair competitive advantage.
- The Commission recommends that Congress encourage the administration to make a priority of obtaining and ensuring China's compliance with its WTO commitments to refrain from forced technology transfers that are used as a condition of doing

business. The transfer of technology by U.S. investors in China as a direct or indirect government-imposed condition of doing business with Chinese partners remains an enduring U.S. security concern as well as a violation of China's WTO agreement. A WTO complaint should be filed when instances occur.

- The Commission recommends that Congress encourage USTR and other appropriate U.S. government officials to take action to ensure that the WTO's Transitional Review Mechanism process is a meaningful multilateral review that measures China's compliance with its WTO commitments. If China continues to frustrate the TRM process, the U.S. government should initiate a parallel process that includes a specific and comprehensive measurement system. The United States should work with the European Union, Japan, and other major trading partners to produce a separate, unified annual report that measures and reports on China's progress toward compliance and coordinates a plan of action to address shortcomings. This report should be provided to Congress. In addition, independent assessments of China's WTO compliance conducted by the U.S. government, such as USTR's annual report, should be used as inputs in the multilateral forum evaluating China's compliance, whether that forum is a reinvented and effective TRM or a new process.
- The Commission recommends that Congress consider options to assist small-and medium-sized business in pursuing trade remedies under U.S. law, such as through section 421 cases.

#### ENDNOTES

1. U.S.-China Economic and Security Review Commission, *Hearing on China and the WTO: Compliance and Monitoring*, testimony of Eric H. Smith, February 5, 2004, p. 136.

2. Neil King Jr., "China Agrees to Curb Piracy of U.S. Goods," *Wall Street Journal*, April 22, 2004, A-2.

3. U.S.-China Economic and Security Review Commission, *Hearing on China and the WTO: Compliance and Monitoring*, testimony of Charles Freeman, February 5, 2004, p. 27.

4. U. S. General Accounting Office, *World Trade Organization: First-Year U.S. Efforts to Monitor China's Compliance*, GAO-03, 461 (Washington, DC: March 31, 2003).

5. China's average tariff rate is currently 10.4 percent and will be reduced to 9.8 percent by 2010 if China's WTO accession agreements on the matter are implemented. "China Cutting Average Tariff Rate to 10.4%," *China Daily*, January 2, 2004.

6. China committed to granting trading and distribution rights to foreign minority-owned joint ventures by December 11, 2002. For this and the following bullet, the December 11, 2003, deadline applies to foreign majority-owned joint ventures.

7. United States Trade Representative, *2003 Report to Congress on China's WTO Compliance* (Washington, DC: December 11, 2003); see also GAO, *World Trade Organization: Analysis of China's Commitments to Other Members*, GAO-02-1056 (Washington, DC: October 3, 2002); and Julie Walton, "WTO: China Enters Year Three," *China Business Review*, vol. 31, no. 1 (Jan.-Feb. 2004). For a more comprehensive analysis of China's obligations, see Stewart, *Accession of The People's Republic of China to the World Trade Organization*.

8. GAO, *World Trade Organization: First-Year U.S. Efforts to Monitor China's Compliance*.

9. See the record of the Commission's hearing on *China and the WTO: Compliance and Monitoring*, held on February 5, 2004. See also USTR's *2003 Report to Congress on China's WTO Compliance*, the report by Terence P. Stewart, and the numerous reports of industry groups.

10. National Association of Manufacturers (NAM), *Review of China's Compliance with its WTO Commitments*, (Washington, DC: NAM, September 10, 2003); and

Wayne M. Morrison, *China and the World Trade Organization*, Congressional Research Service Report to Congress (Washington, DC: August 6, 2003).

11. International Intellectual Property Alliance's *2003 Special 301 Report: People's Republic of China* (Washington, DC: February 13, 2004). Available at [www.iipa.com/rbc/2004/2004SPEC301CHINA.pdf](http://www.iipa.com/rbc/2004/2004SPEC301CHINA.pdf).

12. U.S.-China Business Council, *China's WTO Implementation: a Mid-Year Assessment* (Washington, DC: 2003); and Robert Vastine, *Progress of China's Compliance with WTO Commitments to Liberalization of Trade in Services*, Coalition of Service Industries, Statement to the Trade Policy Staff Committee (Washington, DC: October 3, 2003).

13. National Electrical Manufacturers Association, *Statement by the National Electrical Manufacturers Association (NEMA) for TPSC (Trade Policy Staff Committee) Review of China's Compliance with its World Trade Organization (WTO) Obligations* (Washington, DC: September 18, 2003); U.S.-China Economic and Security Review Commission, *Hearing on China and the WTO: Compliance and Monitoring*, testimony of Robert Carlson, February 5, 2004, p. 109; and United States Council for International Business, *China WTO Written Comments: Trade Policy Staff Committee* (Washington, DC: September 10, 2003).

14. Information Technology Industry Council Press Release, "Top Administration Officials Challenge Chinese WLAN Standard" (March 4, 2004). Available at [www.itic.org/2003prs/040304.2.htm](http://www.itic.org/2003prs/040304.2.htm).

15. Semiconductor Industry Association, "SIA Issue Backgrounders: China." Available at [www.semichips.org/backgrounders—china.cfm](http://www.semichips.org/backgrounders—china.cfm)

16. William B. Abnett and Robert B. Cassidy, *China's WTO Accession: The Road to Implementation*, National Bureau of Asian Research Special Report, No. 3 (Seattle, WA: November 2002).

17. U.S. Chamber of Commerce, *China's WTO Record: A Two-Year Assessment* (Washington, DC: September 18, 2003).

18. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment and Exchange Rate Policies: Impact on the U.S.*, Testimony of Kathleen Walsh, September 25, 2003, p. 161.

19. U.S.-China Economic and Security Review Commission, *Hearing on China as an Emerging Regional and Technological Power: Implications for U.S. Economic and Security Interests*, testimony of Peter Cowhey, February 13, 2004, p. 17.

20. Walton, "WTO: China Enters Year Three."

21. American Chamber of Commerce in China, *2003 White Paper on American Business in China*.

22. Myron Brilliant, *China's WTO Record: A Two-Year Assessment* (statement prepared October 3, 2003, for the Interagency Trade Policy Staff Committee).

23. The National Association of Manufacturers, *Review of China's Compliance with its WTO Accession Commitments* (comments submitted to the interagency Trade Policy Staff Committee, September 10, 2003).

24. U.S.-China Economic and Security Review Commission, *Hearing on China and the WTO: Compliance and Monitoring*, testimony of Robert Cassidy, February 5, 2004, pp. 63–4.

25. U.S. International Trade Commission, *Understanding Safeguard Investigations*. Available at [www.usitc.gov/us201.htm](http://www.usitc.gov/us201.htm).

26. Peter S. Goodman, "China Assails Import Limits," *Washington Post*, November 20, 2003.

27. U.S.-China Economic and Security Review Commission, *Hearing on China's Impact on the U.S. Manufacturing Base*, testimony of Norman Chapman, January 30, 2004, p. 32.

28. Findings available from the ITC, "Investigations Under Section 421 of the Trade Act of 1974." Available at [www.usitc.gov/7ops/chinasafeguard.htm](http://www.usitc.gov/7ops/chinasafeguard.htm).

29. The statute governing section 421 cases instructs the president to take into account, *inter alia*, "(D) the probable effectiveness of the actions authorized under paragraph (3) [options for import relief] to facilitate positive adjustment to import competition; (E) the short- and long-term economic and social costs of the actions authorized under paragraph (3) relative to their short- and long-term economic and social benefits and other considerations relative to the position of the domestic industry in the United States economy; (F) other factors related to the national economic interest of the United States, including, but not limited to: (i) the economic and social costs which would be incurred by taxpayers, communities, and workers if import relief were not provided under this part, (ii) the effect of the implementation of actions under this section on consumers and on competition in domestic markets for articles, and (iii) the impact on United States industries and firms as a result of international obligations regarding compensation." U.S. Code, title 19, chapter 12, section 2253.

30. U.S.-China Economic and Security Review Commission, *Hearing on China and the WTO: Compliance and Monitoring*, testimony of Robert Cassidy, February 5, 2004, p. 65.

31. U.S.-China Economic and Security Review Commission, *Hearing on China and the WTO: Compliance and Monitoring*, testimony of Terence P. Stewart, February 5, 2004, p. 68.

32. House Appropriations Subcommittee for the Departments of Commerce, Justice, State, the Judiciary, and Related Agencies, Hearing on *The Effects of Chinese Imports on U.S. Companies*, testimony of William Wolf, May 22, 2003.

33. House Appropriations Subcommittee for the Departments of Commerce, Justice, State, the Judiciary, and Related Agencies, Hearing on *The Effects of Chinese Imports on U.S. Companies*, testimony of Deputy USTR Peter Allgeier, May 22, 2003.

34. In order to reject the suggestion of the ITC to provide import relief, the president must supply a detailed explanation to Congress. Presidential explanations for each case can be found in the report by Terence P. Stewart, page 230. In each of the three cases, the president's explanation considered relief to be either ineffective or outweighed by negative impacts on U.S. producers and consumers.

35. U.S.-China Economic and Security Review Commission, *Hearing on China and the WTO: Compliance and Monitoring*, testimony of James Jochum, February 5, 2004, p. 11.

36. Stewart, *China's Compliance with World Trade Organization Obligations*.

37. USTR press release, "USTR Zoellick to Visit China February 17-20 to Discuss WTO Impact, China's Implementation, and Bilateral Trade Issues" (Washington, DC: February 14, 2003). Available at <http://www.ustr.gov/releases/2003/02/03-09.pdf>.

38. USTR press release, "USTR Announces New China Office, Other Organizational Changes" (Washington, DC: April 13, 2004). Available at [www.ustr.gov/releases/2004/04/04-31.pdf](http://www.ustr.gov/releases/2004/04/04-31.pdf).

39. Department of the Treasury press release, "Secretary Snow Appoints Ambassador Paul Speltz as Economic and Financial Emissary to China" (Washington, DC: April 14, 2004). Available at [www.ustreas.gov/press/releases/js1325.htm](http://www.ustreas.gov/press/releases/js1325.htm).

40. U.S.-China Economic and Security Review Commission, *Hearing on China and the WTO: Compliance and Monitoring*, testimony of Anne Craib, February 5, 2004, p. 141.

41. The Commission heard this opinion expressed frequently during its discussions with WTO officials and member country representatives in Geneva. For example, the European Union and Japan only joined the semiconductor case after the United States took decisive action.

42. Stewart and Stewart Law Offices, *Application of U.S. Countervailing Duty Laws to NMEs [Nonmarket Economies] (Particularly China): Time for Change* (Washington, DC: April 8, 2004).

43. AFL-CIO press release, "AFL-CIO Challenges Bush on China Trade Abuses" (Washington, DC: March 16, 2004). Available at [www.afl-cio.org/mediacenter/prspmt/pr03162004.cfm](http://www.afl-cio.org/mediacenter/prspmt/pr03162004.cfm).

44. Section 301 investigations can also judge whether another country's practice "violates, or is inconsistent with, the provisions of, or otherwise denies benefits to the United States under, any trade agreement." This provision is contained in section 301(a)(1)(A)(i). A January 2000 WTO ruling established that any investigations by the USTR into alleged violations of WTO agreements would have to be pursued within the WTO's dispute resolution framework. The ruling neither considered nor circumscribed the ability of the USTR to examine and act on a trading practice that "is unjustifiable and burdens or restricts U.S. commerce," as covered in section 301(a)(1)(A)(ii). Ultimately, however, any punitive measure imposed by the United States that falls within the issue areas addressed by the WTO would be open to a WTO dispute. The language regarding section 301 cases can be found in the U.S. Code, title 19, chapter 12, section 2411. Jean Heilman Grier of the Office of Chief Counsel for International Commerce (Department of Commerce) prepared an explanation, "section 301 of the 1974 Trade Act," in October 2001 that explains the processes and limits of section 301 investigations. It is available at [www.osec.doc.gov/ogc/occic/301.html](http://www.osec.doc.gov/ogc/occic/301.html).

45. USTR press release, "Statement of U.S. Trade Representative Robert B. Zoellick on U.S.-China Trade Relations" (Washington, DC: April 28, 2004).



## CHAPTER 3

### CHINA'S PRESENCE IN THE GLOBAL CAPITAL MARKETS

**“UNITED STATES CAPITAL MARKETS.** *The Commission shall evaluate the extent of Chinese access to, and use of United States capital markets, and whether the existing disclosure and transparency rules are adequate to identify Chinese companies which are active in United States markets and are also engaged in proliferation activities or other activities harmful to United States security interests.*” [P.L. 108–7, Division P, Sec. 2(c)(2)(D)]

**“CORPORATE REPORTING.** *The Commission shall assess United States trade and investment relationship with China, including the need for corporate reporting on United States investments in China.*” [P.L. 108–7, Division P, Sec. 2(c)(2)(E)]

#### KEY FINDINGS

- China is engaged in a process of selective listing of companies in U.S. capital markets. The vast majority of funds raised by Chinese firms listing in the United States—more than ninety percent—has been for state-owned enterprises (SOEs), even though the Chinese private sector accounts for roughly sixty percent of Chinese GDP.<sup>1</sup> By raising funds in the global capital markets, SOE listings increase the total value of financial resources under the Chinese government’s control, since the government retains majority shareholder control, while minority shareholder rights are virtually nonexistent.
- Since May 2003, China has permitted qualified foreign institutional investors (QFIIs) to invest in its renminbi-denominated A-share market. This allows designated foreign securities firms—about half of which to date have been U.S. companies—to purchase domestic Chinese financial instruments.<sup>2</sup> Because China’s capital markets are still in the early stages of development and lack transparency and a regulatory framework comparable to that of the United States, this situation raises significant governance, financial risk, and potential security-related concerns for qualified U.S. investors purchasing these equities.
- China’s state-owned banks and financial institutions continue to contribute to China’s economic boom through massive, politically driven lending, often based on noncommercial criteria. As a result, these institutions currently have nonperforming loans (NPLs) estimated to be approximately \$500 billion.<sup>3</sup> Since China’s loan growth in the first quarter of 2004 grew by twenty-one percent over the previous year, the total NPL level will likely rise as the poor quality of these loans becomes known.<sup>4</sup> China’s

WTO commitments require the country to open its financial sector to foreign competition five years after accession, or in 2006. However, due to the massive NPL problem many Chinese banks are technically insolvent and unlikely to be able to compete successfully with foreign banks. Thus, it seems unlikely that China will succeed in opening its financial sector in accordance with its WTO commitments.

- Chinese firms are not subject to accounting, transparency, and corporate governance standards consistent with U.S. norms. While the Sarbanes-Oxley Act of 2002 improved disclosure requirements for foreign issuers in the U.S. markets, U.S. investors still lack adequate information about Chinese firms and sufficient investigative mechanisms to ensure Chinese firms are meeting disclosure requirements with respect to material risks to investors. A recent Securities and Exchange Commission (SEC) probe into New York Stock Exchange (NYSE)-listed China Life's accounting irregularities and a trade secret theft and patent infringement suit brought in U.S. courts against NYSE-listed Semiconductor Manufacturing International Corp. (SMIC) underscore this problem.
- Mutual funds that invest in China—so called “China funds”—must do so on the basis of limited and often inaccurate information. It is rare for Chinese companies' financial information to be accessible to the public. As a result, China fund investors are considerably more reliant on their fund managers' due diligence than is common. This concern is compounded when large funds outsource due diligence to small-or medium-sized firms in Hong Kong, a routine practice.
- The Commission remains concerned about the nexus between Chinese firms listing on U.S. and international capital markets and weapons proliferation and China's defense-industrial complex. The U.S. government lacks adequate interagency coordination, regulatory resources, and information collection management to monitor and disclose these important relationships, which are critical to U.S. national security and may represent a material risk to investors. In addition, underwriters have not exercised appropriate vigilance in seeking out this information as part of their due diligence.

#### **OVERVIEW**

The Chinese government has an interest in facilitating Chinese company listings on global capital markets, particularly the New York and Hong Kong stock exchanges. Such listings are predicted to generate approximately \$23 billion in 2004 alone.<sup>5</sup> China's underdeveloped domestic capital markets cannot meet the country's financial needs; thus, the Hong Kong and New York exchanges have become vital sources of capital for Chinese companies. However, China's lack of standardized and enforceable accounting and corporate governance regulations raises troubling issues from both an investor and a national security perspective.

China's legal and regulatory shortcomings present a major challenge to investors interested in purchasing a U.S.-listed Chinese stock or China-focused mutual fund, as well as analysts tasked with unraveling Chinese companies' complex web of relationships

and finances. The SEC recently announced a probe into NYSE-listed China Life's accounting irregularities, and a trade secret theft and patent infringement suit has been brought in U.S. courts against NYSE-listed SMIC. These cases appear to have cooled investors' appetite for Chinese initial public offerings (IPOs) for the moment. With an estimated \$23 billion in initial public offerings planned for 2004, however, China shows no signs of slowing the pace of listings.<sup>6</sup>

The Commission also remains concerned about the identities and activities of certain Chinese firms available for debt and equity purchases by U.S. investors and whether these firms pose security and financial risks. Questions remain regarding whether sufficient, disclosure-oriented regulations are in place to monitor this activity and whether U.S. investors are adequately informed about the true identity of Chinese companies, their senior management, and the nature of their overseas operations and parent and subsidiary relationships. Given the commingled nature of China's commercial firms and China's defense-industrial sector, it is essential for the U.S. government and U.S. investors to understand more fully the relationship between Chinese firms raising money in the global capital markets and the Chinese military and defense establishment. The NORINCO (China North Industries Corporation) case illustrates that listed Chinese companies may be involved in weapons proliferation.<sup>7</sup>

## ANALYSIS AND FINDINGS

### China's Financial and Banking Structure

China's banking sector is dominated by the country's top four commercial banks: Bank of China (BOC), Industrial and Commercial Bank of China (ICBC), Agricultural Bank of China (ABC), and China Construction Bank (CCB). These institutions account for some seventy-five percent of the PRC's total banking assets.<sup>8</sup> At the end of 2001, these four banks alone had 1.4 million employees and 116,000 branches.<sup>9</sup>

Four regulatory bodies govern China's financial sector. The China Securities Regulatory Commission (CSRC), which is modeled on the SEC, is the most far reaching. It formulates and oversees the policies, plans, and laws regulating securities and futures listings. The State Economic and Trade Commission (SETC), a component of the state council, organizes overall national economic plans and industrial policy and also develops the investment plan for nonmonopoly sectors of China's economy. Other government organizations involved in regulating China's financial structure are the Ministry of Finance and the People's Bank of China, the central bank of the PRC.

China's state-owned banks are beset by a nonperforming loan crisis. For decades, in an effort to maintain economic and social stability, the government encouraged banks to lend heavily to prop up failing SOEs.<sup>10</sup> In his testimony before the Commission, Professor Pieter Bottelier described this so-called policy lending and its result: "By allowing the State sector to continue expanding output and employment through easy access to State bank credit (until about 1995), China preserved full urban employment and growth

dynamics throughout the initial stages of its economic transformation, but in doing so, also created the NPL problem.”<sup>11</sup> In effect, the big four banks have been left essentially insolvent.

A comparison that helps put the scale of China’s NPL crisis in perspective is the U.S. savings and loans (S&L) crisis of the late 1980s. Following the wave of deregulation of U.S. financial markets in the early 1980s, the U.S. S&L industry embarked on a speculative lending boom that ultimately led to widespread bankruptcies and the accumulation of a massive portfolio of bad loans. To clean up this problem, Congress established the Resolution Trust Corporation (RTC) in 1989, charging it with taking over bankrupt S&Ls and selling off their assets. The total value of assets and loans taken over and sold by the RTC was \$500 billion, approximately nine percent of 1989 U.S. GDP.<sup>12</sup> As a percentage of GDP, China’s banking crisis is far larger. Goldman Sachs estimates it would cost China between forty-four and sixty-eight percent of GDP to solve the NPL crisis.<sup>13</sup> The scale of the NPL crisis in China is estimated to be approximately \$500 billion.<sup>14</sup> The value of the underlying assets supporting these loans is unknown. However, given that they have often been made on political grounds and for purposes of keeping alive loss-making companies, it is probably fairly low.

Chinese financial institutions have attempted in recent years to purge their books of NPLs through a combination of auctions, direct sales, and joint ventures. While these have often come via transfers of NPLs to China’s four asset management companies, in early 2004 state-owned banks began to sell off the assets directly. So far, China’s attempts to offload NPLs have met with mixed results. Despite Citigroup’s April 2004 purchase of NPLs with a face value of \$242 million, recently, the Chinese authorities blocked the sale of over \$520 million worth of NPLs by China Construction Bank to Morgan Stanley and forced the Bank of China to delay indefinitely a planned NPL auction valued at \$724 million. Both sales were blocked by Beijing because they came at too low a price. This suggests that in 2004 “the market for disposing of NPLs in China is in trouble.”<sup>15</sup>

Perhaps most troubling is that China continues to use non-commercially justified bank lending to promote growth and investment. Total bank lending increased dramatically in 2003 and in the first quarter of 2004 grew twenty-one percent over the previous year.<sup>16</sup> As a result of this vast new expansion of bank credit, many loans will likely end up as nonperforming and therefore risk undermining the measures that China has taken to work through its existing NPL crisis.<sup>17</sup> In short, despite China’s efforts to reduce money supply growth (e.g., selling bank bills, raising reserve requirements and placing a brief moratorium on bank lending) the politicized nature of the lending system means that banks will probably continue to generate bad loans.

With Chinese banks seeking listings on global capital markets, the implications for investors are serious. For instance, investors buying shares in the Industrial and Commercial Bank of China, China Construction Bank, or Bank of China (all of which are scheduled to list on the NYSE in the next two years<sup>18</sup>) could be

misled by restructured balance sheets and unknowingly purchase a pool of fresh loans that are likely to be uncollectible.<sup>19</sup>

Furthermore, loans that are disbursed by state-owned banks at preferential rates and without the expectation of reimbursement may constitute WTO-inconsistent government subsidies. These loans are made to Chinese exporters, and go to domestic producers who compete with foreign firms. For example, in 2003, financial institutions were required to issue loans in accordance with industrial policies.<sup>20</sup> These subsidies give Chinese companies an unfair advantage over foreign competitors and as a result appear to be inconsistent with WTO regulations.

In some cases, China is seeking to increase foreign ownership of its healthier banks. In December 2003, the China Banking Regulatory Commission granted approval to BNP Paribas (France) to purchase a fifty percent stake in the Industrial and Commercial Bank of China's joint venture bank, the International Bank of Paris and Shanghai. This bank, renamed BNP Paribas (China) Limited, is China's first foreign-owned, locally incorporated bank.<sup>21</sup> China's goal in allowing foreign investment into its banking sector is, in part, to improve the banks' financial health and lending standards.

### **PRC Corporate Governance and Accounting Standards**

China's legal framework for corporate governance is largely contained within the CSRC's Code of Corporate Governance of Listed Companies in China. In addition, the Certified Accountant Law (1993), Audit Law (1994), Company Law (1994), People's Bank of China Law (1995), Commercial Bank Law (1995), Securities Law (1998), and Accounting Law (1999) provide the framework for China's domestic capital markets.<sup>22</sup> Due to inadequate enforcement capability, regulations governing the state-company relationship are not always implemented.<sup>23</sup>

On the surface, listing shares of state-run firms in global capital markets should dilute state control and increase accountability to investors. Paradoxically, it may in fact serve only to expand the resources under state control. As explained by Professor Donald Clarke, of the University of Washington School of Law:

*China Telecom Corporation Limited (CTCL) is a shareholding limited company with shares listed on the New York and Hong Kong stock exchanges. Almost 80 percent of its stock, however, is owned by China Telecom Group Company, a traditional SOE with no shares that is directly owned by the Chinese government, while less than 12 percent of the equity was sold to the public. By creating a controlled subsidiary in the form of a shareholding company and selling a small proportion of its shares to the public, the parent SOE actually increased the value of assets under state control.<sup>24</sup>*

Chinese corporate governance standards lag far behind the United States. One problem is the state's continued control over resource allocation.<sup>25</sup> The legal framework enshrines a top-down management structure that obstructs the operation of market

forces. As a result, even if laws were properly implemented, the results would not be economically efficient.<sup>26</sup>

A second problem concerns minority shareholder rights. Cronyism, insider dealings, and rubber stamp shareholder meetings remain principal causes of investor powerlessness.<sup>27</sup> Because foreign investors are forbidden from holding a controlling interest in Chinese firms, the majority shareholder (the government, in the case of an SOE) can ignore minority investors' demands for upgraded corporate governance, transparency, and accountability.<sup>28</sup>

A third problem is the lack of a sound credit rating system. In part, this is due to poor corporate accounting practices that make it exceedingly difficult to rate Chinese companies. Another major inhibitor is the Chinese government. Companies need permission from the government before they can approach a credit rating agency, and Chinese law allows firms to keep their rating confidential.<sup>29</sup> According to Standard & Poor's, Chinese companies frequently pull out of the ratings process if they receive a bad rating. To date, credit rating agencies have given high ratings to Chinese companies based on the overall economy's impressive economic growth and the government's support of banks and SOEs.<sup>30</sup> By and large, Chinese firms' high domestic credit ratings are a reflection of implicit government guarantees rather than the health of the company or industry.

China does not follow international accounting standards. This represents a major roadblock to transparent corporate governance. For example, a 2002 survey done by CSRC revealed that one in ten listed companies had doctored its books and, in January 2004, China's Finance Ministry reported that 152 firms had misstated profits by a combined \$350 million.<sup>31</sup> PRC officials estimate that China needs three hundred thousand qualified accountants, while other independent estimates are closer to four million. To address this shortage, Beijing has opened two national accounting institutes to train accountants in international accounting methods. The Chinese government is also requiring publicly held companies to report financial data every quarter rather than every six months.<sup>32</sup>

China's state-run firms are plagued with accounting irregularities. An egregious example of inadequate disclosure was recently discovered at China Life, China's biggest insurer. The SEC is investigating an alleged \$652 million fraud,<sup>33</sup> and investigators in Hong Kong and on the mainland are looking into allegations of high-level insider dealings.<sup>34</sup> In a telling comment, indicative of the clientelist relationship between Chinese companies and the government, China's finance minister, Jin Renqing, came swiftly to China Life's defense, claiming the company had "behaved very openly" in the run-up to its IPO.<sup>35</sup> China Life issued the world's largest IPO in 2003—\$3.4 billion. Another example is SMIC, which has acknowledged that an executive had made "inaccurate statements" about the company's ability to meet expenditures through 2005.<sup>36</sup>

China is making some efforts to improve its corporate governance standards. Many small and medium-sized Chinese firms seeking to list in the United States are improving transparency and accounting practices in an effort to adhere to SEC regulations. On the domestic side, in early 2002, CSRC issued the Code of Corporate Governance of Listed Companies, which raised standards for account-

ing procedures and information disclosure. Another development came in January 2003, when China's "highest court said that shareholders could file individual or class-action lawsuits against companies that lie about their accounts."<sup>37</sup> On passage of the law, about nine hundred suits were filed (there were a total of one thousand two hundred listed companies in China at the time).<sup>38</sup>

### **China's Domestic Capital Markets**

China's domestic capital markets system was established to help meet SOEs' capital needs and thereby reduce the burden on Chinese state-owned banks to do so. Since the Chinese banking system still supplies Chinese businesses with ninety percent of their funding, Beijing also hopes this strategy will have the corollary benefit of reducing the state-owned banks' NPL problem.<sup>39</sup>

Unfortunately, providing the general public with a means of diversifying investment portfolios and hedging consumption/income risks are not among Beijing's primary reasons for encouraging its citizens to invest in its domestic capital markets.<sup>40</sup> The Chinese government often manipulates the markets to advance its political agenda. Rather than allowing capital markets to support the growth of vibrant private enterprises, China's leaders view them as a means to achieve social and industrial policy objectives and subsidize SOE restructuring, goals that are unrelated to market-based considerations. For example, Beijing is increasingly concerned about the strain on supplies of natural resources and raw materials caused by rising investment in heavy industry. To limit the development of these industries, the CSRC is attempting to prohibit firms in the steel, cement and aluminum sectors from undertaking new bond or share issues.<sup>41</sup> As a result, China's equity and bond markets lack currency convertibility, market liquidity, and an adequate range of investment instruments to guarantee moderate returns and reliable payouts.<sup>42</sup>

Three types of shares are sold on the Shanghai and Shenzhen stock exchanges. "A shares" are held by residents of China (and a select number of designated qualified foreign institutional investors). "B shares" are open to foreign investors. They are denominated in renminbi but payable in foreign currency. "C shares" are wholly owned by SOEs and are not publicly traded. In January 2004, there were 1,290 A and B share listed companies in China,<sup>43</sup> and total market capitalization in China's capital markets was \$532 billion or forty percent of GDP. This figure is expected to rise to \$850 billion (forty-seven percent of GDP) and \$1.35 trillion (sixty percent of GDP) by 2007 and 2010, respectively.<sup>44</sup> Originally, China established the B share market to boost domestic firms' access to foreign capital. However, this strategy has had only limited success. In response, China has begun to open the A share market to QFIIs.

The Chinese government has undertaken measures to improve the liquidity and transparency of its domestic capital markets. The State Council has set forth a list of reforms necessary for achieving these goals. These include strengthening institutional investors, increasing financing channels for securities companies, and attracting new sources of funds into the market.<sup>45</sup> The PRC has also recruited foreigners to help upgrade its securities market. For exam-

ple, Anthony Neoh, a former chair of the Hong Kong Securities and Futures Commission, was hired as chief advisor to the CSRC, and Laura Cha, a highly respected U.S.-trained lawyer with legal experience in both the United States and Hong Kong and former Hong Kong Securities and Futures Commission vice-chair, was hired as CSRC vice-chair.<sup>46</sup>

The Chinese government is also working to reform its domestic debt markets. The corporate bond market is currently small. Only \$3.9 billion in corporate bonds were issued in 2002. Sovereign bonds accounted for \$568 billion, compared with \$8 trillion in U.S. Treasuries. Last year, China raised \$1 billion in dollar-denominated sovereign bonds and \$500 million from a euro tranche.<sup>47</sup> While there is a demand in China for dollar-denominated corporate bonds, so far none have been issued.

To be sure, Chinese corporate governance remains a work in progress. However, the end result will not necessarily be comparable to accepted international standards. Despite reforms, China's domestic capital market system remains the domain of the SOE. Stringent listing requirements, long waiting periods, and a prohibition against restructuring during the lengthy waiting period "creates a perception and a reality to the small and medium (private) enterprises that these stock exchanges do not want them."<sup>48</sup>

### **China's Outreach to International Capital Markets: Buyer Beware**

The Chinese government facilitates and makes the decisions concerning foreign stock market listings of Chinese firms and to date has heavily favored SOEs. Although scores of Chinese firms list on the New York Stock Exchange and NASDAQ, and a handful list in London, the Hong Kong Stock Exchange has been, and likely will continue to be, the destination of choice for mainland companies seeking to raise capital in international markets. Figure 3.1 lists the IPOs for Chinese companies at home, abroad, and in the United States between 2001 and 2004.

**Figure 3.1 Home, Abroad, and U.S. Initial Public Offerings of Chinese Companies (US\$m Raised), 2001–04**

Year	A-Share	Overseas	U.S.*
2001	4,413.04	2,364.30	1,720.7
2002	5,987.21	2,497.75	1,434.2
2003	5,037.60	6,364.88	3,098.0
2004	976.56**	22,700***	N/A

\*U.S. totals are included in overseas totals.

\*\*Total as of March 17, 2004.

\*\*\*Reuters' projection for 2004.

Source: Deologic: A-Share and Overseas totals. IPO Home ([www.ipohome.com](http://www.ipohome.com))—U.S. totals.

### **Hong Kong**

There are two types of mainland Chinese company listings in the Hong Kong market: "H-shares," which are companies that are floated on the Hong Kong Exchange but incorporated in the mainland,

and “Red Chips,” which are companies incorporated and listed in Hong Kong with controlling Chinese shareholders.

Hong Kong’s capital markets have benefited from Chinese companies’ listings. In 2003, the Hong Kong Exchange ended at a two-and-a-half year high due primarily to mainland IPOs. Some of these new listings were oversubscribed by five hundred to seven hundred times. The largest were Property and Casualty Co., LTD (PICC), China Life, Great Wall Automobile, and Zijin Gold Mining. PricewaterhouseCoopers expects approximately one hundred firms (mostly from the mainland) to raise about \$12.8 billion on Hong Kong stock market listings in 2004.<sup>49</sup>

The Hong Kong Exchange has undergone important regulatory changes in recent years to improve its operations and governance standards. In March 2002, the Hong Kong Legislative Council passed a new Securities and Futures Ordinance to improve the supervision and regulation of Hong Kong’s financial markets. And in 2001, the last of the interest rate rules was abolished, “which brought to an end a government sponsored cartel in the banking industry.”<sup>50</sup> Most recently, on April 1, 2004, the Hong Kong equity market banned so-called “back-door listings.” This prevents firms from injecting assets into shell companies and skirting disclosure requirements necessary for proper corporate governance enforcement.<sup>51</sup> In an effort to beat the deadline, Chinese appliance goods giant Haier and fixed-line telecommunications company Pacific Century Cyber Works (PCCW) rushed their back-door listings to market.<sup>52</sup>

Unfortunately, Hong Kong’s stock exchange continues to operate under an apparent conflict of interest. “The same entity which operates the Hong Kong Exchange and earns fees from such listings, Hong Kong Exchanges & Clearing, also has the authority to regulate the listings, including initial listings of companies.”<sup>53</sup> This contrasts with the United States, where the SEC regulates the markets.

### ***United States***

At present there are approximately seventy Chinese companies listed on the American Stock Exchange, NASDAQ, or the NYSE, and the vast majority of funds raised by Chinese firms in the U.S. markets have gone to state-owned firms.<sup>54</sup> In March and April 2004, however, public inquiries by the SEC into the circumstances surrounding several of these listings led to some apprehension. In April 2004, Jamie Allen, secretary general of the Asian Corporate Governance Association, explained investors’ reaction: “I can’t say that over the past few months I saw investors being concerned about [the] corporate governance of the [Chinese] companies being listed. Now that the IPO rush seems to be slowing down, investors are becoming more concerned.”<sup>55</sup>

The SEC’s corporate governance and transparency requirements were strengthened in January 2002 pursuant to the Sarbanes-Oxley Act (P.L. 107–204). This act requires chief executive officers (CEOs) to certify the accuracy of their SEC filings and carries criminal penalties for inaccurate filings. “According to bankers, Sarbanes-Oxley is causing particular discontent among the Chinese CEOs. Their government is pushing for the country’s larger compa-

nies to be listed in both Hong Kong and the United States, much to the angst of those who will take charge.”<sup>56</sup> Even in cases where senior managers are not suspected of wrongdoing, they are wary of taking responsibility for accounting figures provided by others. “Sarbanes-Oxley has definitely raised the bar and it could be the reason why some Chinese corporates pull out.”<sup>57</sup>

Most Chinese firms list in the U.S. capital markets using American depositary receipts (ADRs) or as foreign filers. Companies that list using these methods are subject to less stringent SEC disclosure regulations than those that list directly or through a merger. Despite these weaker reporting requirements, some of China’s highest grossing IPOs, such as PetroChina, Ctrip, China Life, and China Unicom, have listed as ADRs. Individual investors are often unaware of the important differences in disclosure when choosing which Chinese companies’ stock to purchase.<sup>58</sup>

Some Chinese firms have gained listings in the United States through reverse mergers. “It is an active and growing strategy in China for Chinese companies to become public in the U.S. not through an IPO but by merging with an existing dormant U.S. public company and then pursuing a raise of capital through the private placement markets.”<sup>59</sup> Small—and medium—sized private Chinese firms most often use this method. There are currently thirty-one Chinese companies listed in the United States in this fashion.<sup>60</sup>

After a Chinese firm merges with a listed U.S. public company, the firm’s accounting practices become subject to SEC regulations. “Among other factors, a board of directors with independent directors and improved internal accounting procedures serve to increase the transparency of the Chinese company to the advantage of U.S. investors.”<sup>61</sup> However, an accounting and audit culture is important to any company’s development of proper corporate governance and transparency. SEC regulation enforcement requiring cooperation from local Chinese authorities also remains a concern with Chinese firms listing in this manner.<sup>62</sup>

Many U.S. investors hold Chinese equities through their mutual funds. The typical China-focused mutual fund (“China Fund”) invests sixty percent of its assets in Hong Kong stocks, with the remaining forty percent split between mainland and Taiwan firms. Some invest in other countries in the region or companies that have a presence in China.<sup>63</sup> In 2003, U.S. investors placed \$835 million into such funds, a ninefold increase over 2002.<sup>64</sup>

Because American investors are unable to access accurate and timely information about shares listed on Chinese exchanges in Hong Kong, Shenzhen, and Shanghai, they must rely on the due diligence of mutual funds. China fund investors therefore depend almost exclusively on mutual fund managers to make decisions based on on-the-ground research. More troubling is that large fund managers often enlist small, locally based firms to perform their due diligence. This is worrisome, given the questions surrounding China’s lax corporate governance and disclosure regulations. The special nature of China funds makes them particularly risky investments.

For example, a Citigroup-Smith Barney report issued on March 3, 2004, noted that the Aluminum Corporation of China Ltd.

(NYSE: ACH) “has been required to shut down 30% of production in its Guangxi Pingguo Plant due to a power shortage. We have checked with management, who deny that it is suffering power shortages, but indicate that the plant is undergoing annual maintenance.”<sup>65</sup> Thus, Chinese mutual funds should be considered a buyer-beware investment, or, as Joe Grieco, manager of financial products for Parker/Hunter, said, “It’s like buying a pack of cigarettes. We put the surgeon general’s warning on it.”<sup>66</sup>

Key recent and upcoming Chinese IPOs include the following:

- In December 2003, China Life—China’s largest insurer—launched the year’s largest IPO, valued at \$3.46 billion. In June 2003—during a restructuring ahead of China Life’s IPO—“less attractive assets” were transferred to its parent company, and China Life only retained its more desirable assets. But problems surfaced when an alleged \$652 million in irregularities resulted in a class-action suit against the company in U.S. district court. As a result, probes were launched by the SEC and Hong Kong’s Securities and Futures Commission into the company’s dealings. Anticorruption watchdogs in Hong Kong and the mainland are also investigating allegations that friends and relatives of senior China Life Insurance executives received undisclosed “preferential treatment.”<sup>67</sup>
- Semiconductor Manufacturing International Corp.—(SMIC) the largest manufacturer of semiconductor chips in China, launched a \$1.8 billion IPO on the New York and Hong Kong stock exchanges in March 2004. Despite reports that it would “see roaring investor demand,” the Shanghai-based company saw its offering fizzle.<sup>68</sup> SMIC shares fell eleven percent on the first day of trading, amid a storm of allegations. Taiwan Semiconductor Manufacturing, which had originally filed suit against SMIC on December 23, 2003, filed papers with a U.S. federal court on March 23, 2004, claiming it had new evidence, including “eyewitness accounts and technical verification,” proving SMIC had stolen aspects of its chip design.<sup>69</sup> SMIC’s offering came just a few days after the United States lodged a complaint with the WTO over tax breaks granted by the Chinese government to Chinese semiconductor firms. But perhaps most damaging was the company’s retraction of a statement by its chief financial officer that it would not need to seek external funding for capital expenditures.<sup>70</sup>
- The Bank of China (BOC), with total assets of \$440 billion in late 2002,<sup>71</sup> is reported to be preparing for an IPO in 2005. The state-owned commercial bank received \$22.5 billion in December 2003 from China’s central bank to rebuild financial reserves. The BOC has significant internal problems, including recent corruption scandals and an NPL level between twenty and fifty percent.<sup>72</sup> China’s central bank says that, as part of the IPO process, BOC will be required to come up with core business strategies by the end of April 2004 and identify annual targets for the coming years.<sup>73</sup>
- China Construction Bank (CCB), China’s third largest lending institution, is planning to make what could be a record IPO in late 2004 or 2005 worth an estimated \$5 to \$10 billion.<sup>74</sup> CCB hopes to list simultaneously on stock markets in China, Hong

Kong, and the United States. The bank, which has hired Citigroup Inc. and Morgan Stanley to lead manage the IPO, will set up a joint-stock company to own the assets it plans to list.<sup>75</sup> CCB is also faced with the task of reducing bad debts. Like the Bank of China, the Chinese government estimates that nearly one-fifth of CCB's loans are NPLs. But economists in China say a number between forty and fifty percent is more realistic. Chinese Premier Wen Jiabao recently criticized CCB managers for lack of commitment to reform and commercialization. CCB also received a cash infusion of \$22.5 billion from China's central bank to reduce its NPL ratio.<sup>76</sup>

### **Security-Related Dimensions**

During the 1980s and 1990s, China's economy was dominated by SOEs, many of which were managed by the People's Liberation Army (PLA) and were a part of China's defense-industrial complex. In 1998, in an effort to curtail corruption and return the PLA to focusing on its primary military functions, then-President Jiang Zemin called for the dissolution of this military-business structure. Divestiture served as recognition that the military should not run commercial operations.<sup>77</sup>

Because many of the former PLA enterprise heads transferred control to relatives or former military officers, the Commission remains concerned that these enterprises have retained unofficial links to their former PLA counterparts.<sup>78</sup> Moreover, the links between military and commercial production in China, particularly in SOEs, mean that foreign investors in these firms can rarely be sure of their investment's final destination. It is incumbent upon fund managers and underwriters to make investors aware of any relevant ties between China's military and companies listed in global capital markets, as such ties could be a material risk for investors.

In addition to linkages to the Chinese defense-industrial complex, the Commission continues to be concerned about the possible nexus between Chinese firms listing on U.S. and other international exchanges and weapons proliferation. The 2003 Intelligence Authorization Act (P.L.107–306 sec. 827) included a provision that required the director of Central Intelligence to report annually on whether any Chinese or other foreign companies determined to be engaged or involved in the proliferation of weapons of mass destruction (WMD) or their delivery systems have raised, or attempted to raise, funds in the U.S. capital markets. This requirement, however, was repealed in the 2004 Intelligence Authorization Act (P.L. 108–177, sec. 361e). The Commission believes there is need for a robust, coordinated effort by the U.S. government to ensure that U.S. investors are not unwittingly investing their funds in Chinese military-related firms or weapons proliferators, and that this important issue has not been accorded a high enough priority by the intelligence community. The repealed reporting provision was a solid, positive step in this direction, and the Commission believes it should be reinstated and expanded.

As of 2002, more than three-quarters of companies listed as A shares in China's capital market are state controlled.<sup>79</sup> These include known proliferators such as NORINCO, which was sanctioned by the U.S. government on four separate occasions in 2003

for offenses including missile proliferation and sales of equipment or expertise to Iran that could be used in a “WMD or cruise or ballistic missile” program.<sup>80</sup> Under the QFII program discussed above, designated foreign financial institutions can now purchase A shares directly. This means that QFIIs, about half of which are U.S. firms (including Morgan Stanley Dean Witter, Citibank Global Markets, Morgan Chase Manhattan Bank, and Goldman Sachs), can purchase the company’s stock.<sup>81</sup> More importantly, the history of Chinese corporate nontransparency makes it difficult for investors to recognize the complex and often secretive relationships among companies, particularly with regard to state-owned entities.<sup>82</sup>

#### RECOMMENDATIONS

- The Commission recommends that Congress reinstate the reporting provision of the 2003 Intelligence Authorization Act [P.L. 107–306, Sec 827] directing the director of Central Intelligence (DCI) to prepare an annual report identifying Chinese or other foreign companies determined to be engaged or involved in the proliferation of weapons of mass destruction or their delivery systems that have raised, or attempted to raise, funds in the U.S. capital markets. The Commission further recommends that Congress expand this provision to require the DCI to undertake a broader review of the security-related concerns of Chinese firms accessing, or seeking to access, the U.S. capital markets. This should include the establishment of a new interagency process of consultations and coordination among the National Security Council, the Treasury Department, the State Department, the SEC, the Federal Bureau of Investigation (FBI), and the intelligence community regarding Chinese companies listing or seeking to list in the U.S. capital markets. The aim of such an interagency process should be to improve collection management and assign a higher priority to assessing any linkages between proliferation and other security-related concerns and Chinese companies, including their parents and subsidiaries, with a presence in the U.S. capital markets.
- The Commission recommends that Congress require mutual funds to more fully disclose the specific risks of investments in China. This should include disclosure to investors of the identities of any local firms subcontracted by funds to perform due diligence on Chinese firms held in their portfolios. Subcontractors’ principal researchers, location, experience, and potential conflicts of interest should all be disclosed.
- The Commission recommends that Congress direct the Commerce Department and USTR to evaluate whether Chinese state-owned banks’ practice of noncommercial-based policy lending to state-owned and other enterprises constitutes an actionable WTO-inconsistent government subsidy and include this evaluation in the report on subsidies recommended in Chapter 1.
- In its 2002 Report, the Commission recommended that Congress prohibit debt or equity offerings in U.S. capital markets by any Chinese or foreign entity upon which the State Department has imposed sanctions for engaging in the proliferation of weapons of mass destruction or ballistic missile delivery systems. The

Commission further believes that Congress should bar U.S. institutional or private investors from making debt or equity investments, directly or indirectly, in firms identified and sanctioned by the U.S. government for weapons proliferation-related activities, whether they are listed and traded in the United States or in the Chinese or other international capital markets. For example, NORINCO, a company sanctioned by the U.S. government, is currently available for purchase on the Chinese A share market. U.S.-based qualified foreign institutional investors that have rights to trade on this exchange should not be permitted to invest in NORINCO or any other firm officially determined to have engaged in the proliferation of WMD or ballistic missiles.

**Appendix A**  
**Chinese Public Companies Listed in the United States\***

Name	Symbol	U.S. Filer	For- eign Filer	For- eign Filer ADR
Aluminum Corp. of China Ltd.	ACH			x
American Oriental Bioengineering, Inc.	AOBO	x		
AP Henderson Group	APHG	x		
Asiainfo Holdings, Inc.	ASIA	x		
ASAT Holdings Ltd.	ASTT			x
AXM Pharma, Inc.	AXJ	x		
Stratabid Com, Inc	BBOI	x		
Bluepoint Linux Software Corp.	BLPT	x		
Bonso Electronics International, Inc.	BNSO		x	
Beijing Yanhua Petrochemical Co.	BYH			x
China Automotive Systems, Inc.	CAAS	x		
Brilliance China Automotive Holdings Ltd.	CBA			x
China Cable & Communication, Inc.	CCCI	x		
China Eastern Airlines Corporation Ltd.	CEA			x
China National Offshore Oil Corp.	CEO			x
China Telecom Corporation Ltd	CHA			x
China Continental, Inc./UT/	CHCL	x		
Chindex International, Inc.	CHDX	x		
Chinadotcom	CHINA		x	
China Mobile Hong Kong Ltd.	CHL			x
China Resources Development, Inc.	CHRB	x		
China Unicom	CHU			x
Communication Intelligence Corp.	CICI	x		
Euro Tech Holdings Co Ltd	CLWT		x	
Ctrip.com	CTRP			x
China Wireless Communications, Inc.	CWLC	x		
China Yuchai International Ltd.	CYD			x
DF China Technology, Inc.	DFCT			x
Deswell Industries, Inc.	DSWL		x	

**Appendix A—Continued**  
**Chinese Public Companies Listed in the United States\***

Name	Symbol	U.S. Filer	For- eign Filer	For- eign Filer ADR
Far East Energy Corp.	FEEC	x		
Forlink Software Corp, Inc.	FRLK	x		
Graphon Corp/DE	GOJO	x		
Guangshen Railway Corporation Ltd.	GSH			x
Genesis Technology Group, Inc.	GTEC	x		
Highway Holdings Ltd.	HIHO		x	
HuaNeng Power International, Inc.	HNP			x
Harcourt Companies, Inc.	HRCT	x		
Industries International, Inc.	IDUL	x		
Intermost Corp.	IMOT	x		
INTAC International	INTN	x		
LJ International, Inc.	JADE		x	
Jilin Chemical Industrial	JCC			x
JinPan International Ltd.	JST			x
China Life Insurance Co Ltd.	LFC			x
Largo Vista Group Ltd.	LGOV	x		
Linktone Ltd.	LTON			x
Nam Tai Electronics, Inc.	NTE		x	
Netease.com, Inc.	NTES			x
New Dragon Asia Corp.	NWD	x		
Pacificnet, Inc.	PACT	x		
Peak International Ltd	PEAK	x		
PetroChina Company	PTR			x
Radica Games Ltd	RADA		x	
Sinopec Shanghai Petrochemical Co.	SHI			x
Sina Corp.	SINA	x		
Smith Investment Co.	SMIC		x	
China Petro and Chem Corp (Sinopec)	SNP			x
Sinovac Biotech Ltd.	SNVBF		x	
Sohu.com, Inc.	SOHU	x		

**Appendix A—Continued**  
**Chinese Public Companies Listed in the United States\***

Name	Symbol	U.S. Filer	For- eign Filer	For- eign Filer ADR
Tiens Biotech Group USA Inc.	TBGU	x		
TengTu International Corp.	TNTU	x		
Tom Online, Inc.	TOMO			x
UTStarcom, Inc	UTSI	x		
Webzen Inc.	WZEN		x	
Qiao Xing Universal Telephone, Inc.	XING			x
Xin Net Corp.	XNET	x		
Yi Wan Group, Inc.	YIWA	x		
Yanzhou Coal Mining Co.	YZC			x
Zi Corp.	ZICA		x	
Zindart Ltd	ZNDT			x
China Southern Airlines	ZNH			x
<b>Total</b>	<b>71</b>	<b>32</b>	<b>12</b>	<b>27</b>

\*This chart may not be exhaustive.  
Source: Halter Financial Group, Dallas, TX.

**Appendix B**  
**Expected Chinese IPO's in Global Capital Markets in 2004**  
**Total Expected IPO's ~ \$22.7 billion**

Company	Size of Deal
Semiconductor Manufacturing International Corp (SMIC)	\$1.8 billion
China Oriental Group	246.8 million
Shanghai Forte Land	220.8 million
Weichai Power Co Ltd	148.7 million
Linktone Ltd	86 million
China Green (Holdings)	28.3 million
China Construction Bank	5-10 billion*
Ping An Insurance	2 billion*
China Netcom	1.5-3 billion*
Shenhua Group	1.5 billion*
Minsheng Bank	1 billion*
Air China	500 million*
China Power	500 million*
Shenzhen Energy	500 million*
Tangshan Guofeng Steel Co Ltd	500 million*
Tencent Technology	250 million*
CSMC Technologies Corp	200 million*
Mengniu Dairy	128 million*
China Group Corp	128 million*
<b>Total completed deals</b>	<b>2.5 billion</b>
<b>Total possible upcoming IPOs</b>	<b>20.2 billion*</b>

\*Estimated  
Source: Reuters (as appeared on www.forbes.com)

**Appendix C**  
**Chinese Companies' IPOs: US\$ Billions Raised in International Capital Markets, 2001-2004**



Sources: 2001-2003; Dealogic; 2004 Reuters (projection).

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## **SECTION II REGIONAL AND GEOSTRATEGIC DEVELOPMENTS**

The following section groups topics relating to the regional and geostrategic consequences of China's emergence as a major force. These are China's economic and security impacts in Asia and the current challenges of Hong Kong and Taiwan; China's proliferation practices and the challenge of North Korea; and China's energy needs and strategies.

Chapter 4 examines China's increasing prominence in Asia. Through trade and investment, China has become increasingly interconnected with its Asian neighbors. Investors from Hong Kong, Taiwan, Japan, South Korea, and Southeast Asia are helping to fuel the export processing industries of China that, through global supply chains, deliver to the United States and Europe a wide array of manufactured goods. China's industrial growth has attracted foreign direct investment that might otherwise have gone elsewhere; some industries in Northeast and Southeast Asia have been displaced by competition from China, but Asian suppliers also have been increasingly feeding China's export processing industries and domestic markets. Large trade surpluses with China in 2002–03 have contributed to the growth of most East Asian economies.

Enhanced regional economic linkages have served China's political agenda. Through increasingly active and sophisticated bilateral and multilateral diplomacy, China is presenting itself as a country that is peacefully rising, offering, as it grows, win-win solutions for its economic partners in Asia. It has become more willing, in the past several years, to participate actively in multilateral fora on both economic and security issues—such as APEC, the ASEAN Regional Forum, and the Shanghai Cooperation Organization. Evidence indicates that this diplomatic strategy is making inroads for China, despite a wariness of China's growing military power, particularly on the part of Japan.

Cultivating relationships in Asia buys China time and space to pursue its economic development and harness its economic growth to military modernization. This is transforming the balance of military power in East Asia, particularly in the Taiwan Strait, China's main focus for a potential use of force.

Within the regional dynamic, Chapter 4 explores the difficult challenges for U.S. interests arising from China's relationships with Hong Kong and Taiwan. In these cases, China has not been offering win-win political solutions. China has positioned its military to deter Taiwan from taking political steps Beijing considers unacceptable moves toward independence and to coerce Taiwan to end the island's separate status. Clearly concerned about Taiwan President Chen Shui-bian's reelection and Chen's plan for constitu-

tional revision, China has not offered any vision for a workable resolution of cross-Strait conflict beyond unification under the “one country, two systems” formula. This formula, rejected in Taiwan, is being sorely tested in Hong Kong, where Chinese sovereignty is not disputed. China’s National People’s Congress has frustrated demands for greater democracy in Hong Kong by making unilateral decisions to block further development of constitutionally allowed self-governance, and Beijing has prohibited legislative debate on this matter in Hong Kong.

Chapter 5 looks at China’s weapons proliferation practices and its role in the North Korean nuclear crisis. While becoming enmeshed in the capitalist economies of Asia and the West, China has maintained its traditional state patron-client relationship with North Korea. China has become a major diplomatic player in the ongoing standoff with North Korea over Pyongyang’s development of nuclear weapons. As host of the Six Party Talks, China has helped bring North Korea to the table; but has not adequately employed its considerable political and economic leverage over North Korea to drive Pyongyang toward acceptance of the goal of achieving a complete, verifiable, and irreversible dismantlement of North Korea’s nuclear weapons programs.

Even as China professes to support the goal of a non-nuclear Korean Peninsula and claims to oppose WMD proliferation generally, China’s own proliferation practices remain an ongoing concern. Chinese state companies continue to pursue deals to sell WMD-related items to countries of concern to the United States. The United States has repeatedly imposed sanctions in response to these activities; but sanctions remain limited to penalizing offending companies, despite many of these companies’ direct affiliation with top levels of the PRC government or military.

Lastly, Chapter 6 examines the impact of China’s rapidly growing economy on its energy needs, the implications for global energy supplies, and how this impacts China’s geopolitical relations. China has moved past Japan to rank second (behind the United States) in global energy consumption, and is the world’s second largest oil consumer and its third largest oil importer. These trends have made China increasingly dependent on outside energy sources. China’s energy demands and the means by which it is attempting to address them have put added pressure on global petroleum supplies and prices.

Energy needs have driven China closer to the Middle East and Africa, as well as neighbors in Central Asia, Russia, and the Pacific. China seeks to lock in secure energy supplies, especially new sources of gas and oil not subject to potential disruption in a time of conflict. China has sought energy cooperation with countries of concern to the United States, including Iran and Sudan, which are inaccessible to U.S. and other western firms. Some analysts have voiced suspicions that China may have offered WMD-related transfers as a component of some of its energy deals.

Taken as a whole, China’s growing economic and political clout have important implications for its relations in Asia and beyond, with direct implications for U.S. diplomacy in Asia and for U.S. cross-Strait, nonproliferation, and energy security policies.

## CHAPTER 4

### CHINA'S REGIONAL ECONOMIC AND SECURITY IMPACTS AND THE CHALLENGES OF HONG KONG AND TAIWAN

*“REGIONAL ECONOMIC AND SECURITY IMPACTS. The Commission shall assess the extent of China’s “hollowing out” of Asian manufacturing economies, and the impact on United States economic and security interests in the region; [and] review the triangular economic and security relationship among the United States, Taipei and Beijing. . . .”* [P.L. 108–7, Division P, Sec. 2(c)(2)(F)]

#### KEY FINDINGS

- China is gaining influence in Asia through its rapidly increasing economic weight and successful diplomacy. China is strengthening bilateral economic and security ties with nearly all countries on its periphery and energizing regional trade and security groupings, such as the Shanghai Cooperation Organization (China, Russia, and four Central Asian states) and the multilateral fora of the Association of Southeast Asian Nations (ASEAN). As never before in modern times, countries throughout Asia are weighing the China factor in their external relations and economic strategies.
- During 2002–03, China became the single largest export market for Japan, South Korea, and Taiwan, eclipsing the United States. In Northeast and Southeast Asia, exports have been driven by China’s surging demand for commodities, equipment, and industrial inputs. At the same time, employment, investment, and production in some industries in the region have been adversely affected by a shift of foreign direct investment (FDI) to China and the emergence of China as a major manufacturing power in product lines once dominated by other Asian manufacturers.
- China is extending its influence even as the United States is widely perceived in the region as preoccupied with Iraq, North Korea, and the global war on terrorism and paying less attention to the region’s economic, trade, and development issues. The United States is seen as having allowed the regional trade liberalization mechanism of the Asia Pacific Economic Cooperation (APEC) process to atrophy in favor of pursuing bilateral free trade agreement (FTA) negotiations.
- China’s leaders have rebuffed Hong Kong society’s growing demand for direct elections and more responsive government. A recent decision of the National People’s Congress Standing Committee (NPCSC) rules out until at least 2012 direct election of Hong Kong’s chief executive or the full Legislative Council. This has dashed hopes for early achievement of universal suffrage in

Hong Kong and has seriously set back Hong Kong's ability, under the "one country, two systems" formula, to decide how to govern itself. The significant erosion of Hong Kong's autonomy is a matter to be considered under the terms of the U.S.-Hong Kong Policy Act.

- China has employed its economic and political leverage to isolate Taiwan further by excluding it from most regional economic fora and discouraging others from negotiating bilateral trade agreements with Taiwan, which is entering a critical period in its modern history. Under the terms of the Taiwan Relations Act (TRA), this development should be of concern to the United States.
- Taiwan faces the challenge of solidifying its own political identity and buttressing its security while still finding a way to support its trade and investment interests by gaining direct transport and communications links with the PRC. Business interests in both Taiwan and the United States see direct cross-Strait links as crucial to preventing Taiwan's further marginalization in a regional economy that is increasingly centered on China. There has been no formal cross-Strait dialogue on these matters since 1998.
- Cross-Strait tensions have increased in the past year. Factors include China's continuing military buildup and missile deployments opposite Taiwan, the holding of referenda in Taiwan on the questions of missile defense and cross-Strait relations, the reelection of Taiwan President Chen Shui-bian, and President Chen's proposal for constitutional revision in 2008—to be set in motion by a possible referendum in 2006—that the PRC has equated with an unacceptable timetable for independence.

#### OVERVIEW

In the past two years, China has become even more central to regional and global trade, investment, and production patterns than it was at the time of the Commission's first Report to Congress. The trends the Commission identified in 2002 accelerated as a result of China's December 2001 accession to the WTO and the attendant granting of Permanent Normal Trade Relations status to China.

In the past two years, China has linked its growing economic power with strong diplomatic initiatives throughout Asia. China's softer approach to the region has been dubbed a smile campaign or charm offensive, but it is more than just that—China has injected new energy into bilateral partnerships and multilateral trade and security arrangements.<sup>1</sup> China's active participation in regional groupings such as the Asia Pacific Economic Forum, the Shanghai Cooperation Organization (SCO), and One ASEAN Regional Forum reflects China's use of multilateralism as a tool for pursuing its economic and political interests.<sup>2</sup>

This regional diplomatic effort is designed to serve China's stated strategy of peace and development by promoting a stable security environment and its own access to the world trading system, while it concentrates on domestic economic development and strengthening its military.<sup>3</sup> It also raises considerable challenges for the United States' economic and security relations with the countries of Asia. Some observers consider the implications for longer-term

U.S. interests to be alarming. As one witness who testified before the Commission wrote: “China is patiently and systematically amassing a geopolitical presence of superpower proportions in Asia. Washington must start to take China seriously as a potential great power competitor in the region.”<sup>4</sup>

China-Taiwan relations are entering another period of transformation as two contradictory trends play out. On the one hand, Taiwan investors, particularly those in the information technology (IT) sector, have been pouring money, managers, plant, and equipment into ventures on the mainland. Cross-Strait trade and investment flows are at an all-time high, with the direction of both investment and exports going largely from Taiwan to the mainland. Although mainland exports to Taiwan have increased, Taiwan tightly restricts inward investment from the PRC for security purposes. On the other hand, political attitudes on both sides of the Strait have hardened. There is effectively no public dialogue across the Taiwan Strait. China continues to work to isolate Taiwan internationally. As the rest of Asia and the world establish direct links with Chinese ports, airports, investment zones, and financial centers, Taiwan’s potential as a platform for servicing trade and investments in China has dwindled. Taiwan is becoming marginalized further in the regional economy.

The Commission seeks to assess the degree of regional influence China has gained through its growing economic power and the implications for U.S. economic and security interests in the region. This assessment includes the questions of how economic integration and central-local political dynamics are affecting Hong Kong’s health as a major international finance, services, and transport center; and how cross-Strait economic relations are influencing Taiwan’s economy and security.

On December 4, 2003, the Commission held a hearing on *China’s Growth as a Regional Economic Power: Impacts and Implications*. Witnesses from academia and research institutions testified on China’s growing influence in Asia through its burgeoning diplomatic and commercial ties with neighboring countries and intra-Asian regional groups such as ASEAN.

During the September 25, 2003, hearing on *China’s Exchange Rate, Investment, and Industrial Policies* and the February 12–13, 2004, field hearing in San Diego on *China as an Emerging Regional and Technology Power: Implications for U.S. Economic and Security Interests*, various panels discussed China’s impact on regional economic trends, especially through its growing importance as a manufacturing hub within global supply networks.

From March 14 to 23, 2004, a delegation of Commission members and staff traveled to Tokyo, Hong Kong, and Taipei for discussions with officials, American and local business representatives, academics, and media representatives on regional economic, political, and security questions.

## ANALYSIS AND FINDINGS

### Regional Trade and Investment

Regional trade and investment patterns that emerged in the second half of the 1990s have become more pronounced in the past

two years. A high volume of inward FDI—the majority of it originating in East Asian economies—continues to fuel China’s export-driven economic boom even as global levels of FDI have dropped.<sup>5</sup> China’s December 2001 entry into the WTO locked open China’s access to its key export market, the United States. This sharply reduced the perceived risk premium for FDI in China and intensified FDI inflow. This has implications for all regional economies but especially for the countries of Southeast Asia, which have already experienced a relative decline in FDI flows and could lag behind China in technological progress.<sup>6</sup>

China received the largest amount of inward FDI of any nation in 2002—\$52.7 billion—after averaging about \$40 billion per year for the previous seven years. As pointed out in the Commission’s 2002 Report, FDI projects in China are concentrated on new, green-field investments, whereas FDI directed into the United States generally takes the form of foreign purchases of existing American firms.<sup>7</sup> Global flows of FDI to China over the past seven years exceeded those to the rest of East Asia (excluding Hong Kong) combined, including Japan and Singapore. The large stock of FDI in China—estimated to be nearly \$550 billion at the end of 2003<sup>8</sup>—is a reflection of China’s becoming thoroughly enmeshed in global production networks.<sup>9</sup> As indicated in figures 4.1 and 4.2, the United States has contributed a relatively small share—on average about four percent—of China’s annual flows and cumulative stock of FDI, the bulk of which is sourced from within Asia, notably Taiwan, Hong Kong, Japan, South Korea, Thailand, and Singapore.

**Figure 4.1 World FDI Inflows Into Asia, 1997–2002 (Billions of U.S. dollars)**

	1997	1998	1999	2000	2001	2002	1997–2002
<b>China</b>	\$44.2	\$43.8	\$40.3	\$40.8	\$46.8	\$52.7	<b>\$268.6</b>
<b>Hong Kong</b>	11.4	14.8	24.6	61.9	23.8	13.7	<b>150.2</b>
<b>China &amp; Hong Kong</b>	55.6	58.5	64.9	102.7	70.6	66.4	<b>418.8</b>
Japan	3.2	3.2	12.7	8.3	6.2	9.3	43.1
Indonesia	4.7	–0.4	0.0	0.0	0.0	–1.5	2.8
Korea, Rep. of	2.8	5.4	9.3	9.3	3.5	2.0	32.4
Malaysia	6.3	2.7	3.9	3.8	0.6	3.2	20.5
Philippines	1.2	1.8	0.6	1.3	1.0	1.0	7.0
Singapore	10.7	6.4	11.8	12.6	10.9	7.7	60.2
Taiwan	2.2	0.2	2.9	4.9	4.1	1.4	15.9
Thailand	3.6	5.1	3.6	3.4	3.8	1.1	20.5
Vietnam	2.6	1.7	1.5	1.3	1.3	1.2	9.6

Source: UN Conference on Trade and Development, [www.unctad.org](http://www.unctad.org); time series figures revised 2003.

**Figure 4.2 U.S. FDI Inflows Into Asia, 1997–2002 (Billions of U.S. dollars)**

	1997	1998	1999	2000	2001	2002	1997–2002
Asia/Pacific	\$13.7	\$14.7	\$21.0	\$21.0	\$14.7	\$28.8	\$113.9
Australia	1.2	6.3	4.9	0.9	−0.4	3.7	16.6
<b>China</b>	1.3	1.5	2.6	3.1	1.2	0.9	<b>10.6</b>
<b>Hong Kong</b>	3.8	1.9	4.2	4.3	4.4	2.0	<b>20.6</b>
<b>China + HK</b>	5.1	3.4	4.2	4.3	5.6	2.9	<b>25.5</b>
Indonesia	—	0.5	2.2	1.2	0.026	0.4	4.3
Japan	−0.3	6.4	5.2	8.1	2.3	4.5	26.2
Korea, Rep. of	0.7	0.6	1.2	1.2	1.3	1.4	6.5
Malaysia	0.7	−0.5	—	0.3	−0.004	9.4	9.9
Philippines	0.1	0.3	−0.3	—	−0.4	0.7	0.4
Singapore	3.7	0.3	3.0	2.7	3.8	11.4	24.9
Taiwan	0.7	−0.6	0.6	1.1	0.9	0.9	3.6
Thailand	—	0.4	1.1	0.5	0.8	0.9	3.7

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

China's entry into the WTO, increasing inflows of FDI, and the new production capacity built up in China have led to an unprecedented expansion of China's trade volume. China's total goods trade increased by twenty-one percent in 2002 and by thirty-seven percent in 2003 (with a forty percent rise in imports). Without taking into account transshipments of imports and exports through Hong Kong, China is now the fourth largest trading and exporting nation in the world, after the United States, Germany, and Japan; if Hong Kong's transshipment trade is included, China's total would exceed Japan's. By any measure, China became the third largest importing country in the world in 2003, behind only the United States and Germany.<sup>10</sup>

By the end of 2003, China became the single largest export market for Japan, South Korea, and Taiwan, eclipsing the United States. All three economies enjoyed significant trade surpluses with China in 2003 (Taiwan, \$40 billion; Korea, \$23 billion; Japan, \$15 billion).<sup>11</sup> China's total trade turnover with the ASEAN countries rose to \$78 billion in 2003, with China's imports from ASEAN nations up fifty percent, to \$47 billion (versus \$31 billion in China's exports to ASEAN), giving the ASEAN grouping a surplus of \$16 billion.<sup>12</sup> These regional merchandise trade surpluses reflect China's centrality to global supply chains producing manufactured goods for developed country markets; they are the flip side of China's \$124 billion trade surplus with the United States in 2003.

The economic center of gravity in Asia is shifting from Japan to China. Japanese policymakers are increasingly concerned about the long-term strategic consequences of China's rise. The ongoing shift

of production and FDI to China upset long-standing regional manufacturing networks centered on Japan. In the past several years, large Japanese international firms have recognized that establishing a production base in China is essential to their future financial health. In the 1980s and 1990s, Japanese firms dominated production chains set up in Southeast Asia that channeled exports of industrial inputs from Japan and finished manufactures from Southeast Asia to Japan and other world markets. During this period, Japanese companies outsourced a relatively small percentage of their production overseas, and spent a fairly low level of investment in China compared with other regions.<sup>13</sup>

After the Asian financial crisis (1997–98), the productivity of investment in Southeast Asia declined relative to China, and Japan found its product lines challenged by new production coming out of China. In the late 1990s and early 2000s, Japan increased its investments in China and sourced more of its production in China. In the late 1990s, Japanese companies and localities began to express serious concerns about the hollowing out of manufacturing sectors that had moved to China, but in the past few years the shift of production to China has only accelerated. The profitability of Japanese investments in China reportedly has also increased markedly in the past two years.<sup>14</sup>

South Korea's flow of investments into China amounts to less than five percent of total domestic investment and some Koreans see their companies' association with China as benefiting their own domestic economic reforms. Increased South Korean exports to China have helped bolster already buoyant relations between the Republic of Korea (ROK) and the PRC, whose economic interests seem more aligned than ever.<sup>15</sup> Some analysts believe the ROK economy has suffered dislocations from trade and investment ties with China, however. Korean heavy machinery manufacturers, for example, are reportedly transferring operations to the PRC. South Korea feels these economic shifts to China perhaps more than a larger Japan does. For example, Shanghai and Shenzhen ports have grown at double digits and surpassed Pusan to become the third and fourth busiest container ports in the world. South Korea's global textile exports dropped to a thirteen-year low in 2003 of \$15.2 billion, largely as a result of increased competition from China. Meanwhile, a new trend suggests a possible Chinese strategy to gain greater economic advantage in the future: Chinese firms seeking Korean technology and experience are beginning to invest in Korea in strategic industrial sectors.<sup>16</sup>

Rapid growth in exports from the rest of Asia to feed China's manufacturing sector has taken some of the sting out of hollowing out. In 2003, most major Asian economies ran substantial trade surpluses with China. The question is whether China will continue to move up the technology ladder to such an extent that its current imports from the rest of Asia will slow or change in composition. Classical development economists contend that Japan, South Korea, Taiwan, and the ASEAN nations have no choice but to rise to China's challenge by advancing their own technological base if they want to remain competitive, maintain domestic employment, and improve standards of living.<sup>17</sup>

Chinese production and export of textiles and garments are expected to surge and remain at high levels following the complete phasing out of quotas under the WTO Multifiber Arrangement, as of January 1, 2005, and put added competitive pressure on marginal producers in South and Southeast Asia. According to a set of econometric models presented to the Commission, a combination of FDI diversion and increased Chinese textile and garment production due to the end of MFA quotas could lead to a net loss of national income in the countries of Southeast and South Asia if China's attraction of FDI is accompanied by technological advancement.<sup>18</sup>

### **China's Regional Diplomatic Offensive**

China's regional diplomacy serves its global economic strategy, which is to maintain access to the open, multilateral trading system upon which its rapid growth depends. It also complements China's national security strategy by conditioning regional actors to its peaceful rise, a trend increasingly seen as economically positive and politically benign among many regional actors, notably South Korea and the ASEAN nations.

Asia is going through historic geopolitical changes due to the rise of China. The region is in search of a new order to accommodate China's growing power and influence and to maintain regional peace and stability.<sup>19</sup> China's strategy of promoting bilateral and regional dialogues, trade agreements, and confidence-building measures is consistent with its stated foreign policy goal of peace and development. Chinese media have lately begun to characterize China's emergence as a regional economic and political power as a peaceful rising (*heping jueqi*).<sup>20</sup>

The 2001 APEC summit meeting in Shanghai is a convenient demarcation line for a new assertiveness in China regional policies. Since then, China has shown (1) a more proactive stance in pursuing strategic partnership agreements and adding substance to them; (2) increased support for and participation in regional security mechanisms, notably the Shanghai Cooperation Organization, the ASEAN Regional Forum, and bilateral military exercises; and (3) an emphasis on its economic and political influence, while downplaying its growing military strength.<sup>21</sup>

China touts its policy of noninterference in the internal affairs of other states and contrasts its hands-off approach to that of the United States, which actively pursues an agenda to combat terrorism and to promote human rights and democratic governance. Aside from reiterating the importance of partners accepting its "one China" principle vis-à-vis Taiwan, China makes few political demands on its Asian neighbors. Needless to say, China does not push human rights, labor, or environmental standards in its diplomacy.

China's regional strategies are driven in part by its energy security needs, as discussed in Chapter 6. Major pipeline projects are being planned to connect China to oil and gas fields in Central Asia and the Russian Far East. Moreover, Chinese energy firms have signed long-term contracts to import liquefied natural gas from Australia, Indonesia, and Iran.

China has continued to promote the establishment or strengthening of regional multilateral institutions, such as the Bangkok Agreement, the Shanghai Cooperation Organization (China, Russia, and four Central Asian nations), and the ASEAN Plus One (China) and Plus Three (China, Japan, South Korea) fora.

China is extending its influence even as the United States is widely perceived in the region as preoccupied with Iraq, North Korea, and the global war on terrorism to the exclusion of regional economic, trade, and development issues. While pursuing a global agenda of bilateral free trade agreement negotiations, the United States is seen as having allowed the regional trade liberalization mechanism of the APEC process to atrophy.<sup>22</sup> On the other hand, the U.S. government has not directly challenged China's diplomatic gains in the region, seeming in general to welcome what could be considered healthy economic cooperation and confidence-building measures, such as China's recent search-and-rescue and naval exercises with the Pakistani, Indian, and French navies, respectively.

### **Chinese Initiatives in Southeast Asia**

At the eighth ASEAN summit meeting in Phnom Penh, Cambodia, in November 2002, China's Premier Zhu Rongji announced several diplomatic initiatives. On behalf of the PRC government, he

- forgave the debts of Vietnam, Laos, Myanmar, and Cambodia;
- announced duty-free treatment of imports from Cambodia, Laos, and Myanmar and promised to extend most-favored-nation (MFN) treatment of imports from Vietnam;
- signed on to a Declaration on the Conduct of Parties in the South China Sea; and
- agreed to a framework agreement on the ASEAN-China Free Trade Area—an arrangement that China's Vice Premier Wen Jiabao had proposed in November 2001.<sup>23</sup>

On October 8, 2003, at the ninth ASEAN summit in Bali, Indonesia, China acceded to the 1976 Treaty of Amity and Cooperation—the founding nonaggression pact of the ASEAN grouping. China, soon followed by India, was the first non-ASEAN country to join the pact. The ASEAN governments and China also signed in Bali a Joint Declaration on Strategic Partnership for Peace and Prosperity, which lays out a program to strengthen cooperation on political, security, economic, social, and regional issues. They committed to an enhanced regional security dialogue as well as to the goal of expanding China-ASEAN trade to \$100 billion by 2005.

China's proactive diplomacy with the ASEAN countries appears to be working. According to Sarasin Viraphol, a former Thai diplomat, "More and more, China is doing the things the United States used to do: cooperating, pushing trade, offering help. . . . People are less scared of China now."<sup>24</sup> Kavi Chongkittavorn, a senior editor of the Nation newspaper group in Thailand, says the ASEAN region has been seized by "a China fever, an excitement, [where] all anybody wants to talk about are the opportunities." A recent survey by the Bangkok-based Kasikorn Research Center showed that more than seventy-five percent of Thai respondents see China as Thailand's closest friend, compared to nine percent for the United States and fewer than eight percent for Japan.<sup>25</sup> Professor

Wang Gungwu, director of the East Asian Institute, National University of Singapore, testified to the Commission that China's proactive stance "has been a tremendous boost to ASEAN." He said China's involvement has led to Japan and South Korea showing new interest and has also affected how India and Australia see ASEAN; he expressed the hope that perhaps the United States would also pay more attention to ASEAN.<sup>26</sup>

### **Japanese Economic and Security Concerns**<sup>27</sup>

The official Japanese position on China's rise remains what Prime Minister Koizumi said to visiting PRC National People's Congress Standing Committee Chairman Wu Bangguo on September 5, 2003: "China's growth is not a threat to, but an opportunity for, Japan." Of all the United States' friends and allies in the region, Japan nevertheless appears the most prepared to consider seriously how to respond to China's growing power and influence, both in coordination with the United States and on its own. For Japan, China is the number one issue for the economy and for Japan's future security, although this is often left unspoken.

Given China's high level of FDI, cutthroat internal competition among manufacturers, and low cost of production, Japanese companies have minimal pricing leverage over the manufactured goods they produce in the China market either for internal consumption or for export. Japanese companies exporting industrial inputs and capital equipment into the hot China market find themselves doing well, although Japanese industries face rising raw materials costs (for steel, chemicals, and fiber) largely because of huge and growing Chinese demand. Corporate profits in Japan thus may not benefit from the China factor as much as some had hoped.

As China moves up the technology ladder—in semiconductor manufacturing, biotechnology, telecommunications, and electronic equipment—the question arises of how Japan can fuel China's advance and still retain its own technological superiority over time. This is causing much reflection in Japan—as in the United States—about the need for a strategic reassessment of the needs of the country's innovation infrastructure, including venture capital sources, education and technical training, and research and development.

Japan shares with the United States some more immediate concerns about its companies' ability to compete with China's domestic producers—both in China's domestic market and in third markets—if certain PRC government policies are allowed to stand. The Japanese government, like the United States, is considering how to respond to China's attempts to set a new range of technical standards for new information technologies, such as software standards for advanced cell phones and DVD players and new encryption standards for wireless LANs. Like the United States, Japan sees China's discriminatory tax on imported semiconductor chips as violating WTO norms and has filed a WTO dispute settlement case in parallel with that of the United States.

In the security realm, there is a growing willingness among Japanese officials to discuss what Japan must do to prepare for the security challenges of an economically and militarily powerful China. Japanese national security officials have expressed the view that

Japan's national security would be directly affected by any conflict scenario involving Taiwan by virtue of Taiwan's proximity to Japanese islands and territorial seas. Chinese aggression toward Taiwan would thus not only affect Japan's security interests through the U.S.-Japan alliance, but also directly.

In shaping its defense forces, Japan considers a broad spectrum of possible conflict scenarios. While North Korea poses the most prominent and near-term threat, Japan is also taking note of China's acquisition and development of more sophisticated air and naval weapons systems as well as its ballistic missile force. Japan is procuring or indigenously producing systems that will be useful in countering a longer-term Chinese threat, such as AWACS, air-refueling tankers, AEGIS-equipped destroyers, maritime patrol aircraft, and the SM-3 surface-to-air missile. Japan faces challenges in maintaining a strong defense-industrial manufacturing and R&D base. Its national restrictions against exporting arms constrain its ability to reduce production costs and support R&D efforts across a range of capabilities. Even if export restrictions were eased in the context of supporting coproduction programs with the United States, Japan will still be required to focus on a limited range of technology priorities in funding future R&D and domestic weapons production.

### **Warming Relations with India**

The Commission heard testimony that in recent years India and China have been moving closer in a shift that could affect the strategic realities of Asia. Economic ties are growing. Trade between India and China grew from a mere \$264.8 million in 1991 to \$4.3 billion in 2002.<sup>28</sup> Trade estimates for 2004-05 are closer to \$7 billion, and trade is projected to reach \$10 billion by 2005-06. China continues to draw in FDI at an order of magnitude higher than India (\$52.7 billion vs. \$5.5 billion in 2002). China is studying India's success in software development, while the popular surge for economic reform in India is hugely affected by China's example.

In April 2003, for only the second time in history, an Indian minister of defense paid an official visit to China. In 1998, at the time of India's test of a nuclear device, India's Defense Minister George Fernandes called China India's "potential threat number one," a greater threat than Pakistan. Fernandes' visit to China in 2003 was symbolic of how far Sino-Indian relations had come, although he carried with him a long agenda of concerns to raise with Chinese leaders, including China's ballistic missile assistance with Pakistan, military assistance to the Myanmar regime, and problems along the disputed Sino-Indian border.<sup>29</sup>

Following the Fernandes visit, the first bilateral military exercise between China and India took place in November 2003, a joint naval search-and-rescue exercise off the coast of Shanghai. Such confidence-building measures are expected to continue, but the Indian national security leadership's fundamental perception that China poses a long-term strategic threat is unlikely to change.

China has in recent years emphasized its intent to pursue a balanced foreign policy toward India and Pakistan, a change from the past policy that was markedly in Pakistan's favor. This shift is likely a result of India's growing significance as an economic and

military power in Asia. Other issues, however, are increasingly affecting China's relations with Pakistan. Revelations of Pakistan's transfer of nuclear technology to North Korea have placed China in a difficult position vis-à-vis the international community and North Korea.<sup>30</sup>

### **Outreach to Central Asia and Russia**

China has continued to build its relations with the republics of Central Asia over the past two years, both bilaterally and through the Shanghai Cooperation Organization (SCO).<sup>31</sup>

Over the past two years, trade between China and the Central Asian republics and Russia has continued to grow steadily, from a relatively low base, and energy and transport projects linking China with Kazakhstan, in particular, continue to be developed. The SCO is becoming more active as a forum for regional economic relations. SCO members signed a framework agreement for economic cooperation in September 2003. In January 2004, the SCO established a formal secretariat in Beijing, headed by a former PRC vice minister of foreign affairs.

China's focus on security cooperation in Central Asia serves its goals of stabilizing its frontiers, countering international and domestic terrorism, and increasing political leverage in an area of the world that hosts a significant U.S. military presence. Even as the Central Asian republics and Russia are concerned about growing Chinese economic influence in their sparsely populated regions, they also hope transborder trade will stimulate local economies.

In the wake of the September 11 terrorist attacks, and as Operation Enduring Freedom was unfolding, the Chinese People's Liberation Army held its first peacetime military exercise with a foreign nation in October 2002, with the Republic of Kyrgyzstan, for the purpose of training border forces to deal with a possible terrorist-backed insurgency. Within the framework of the SCO, counterterror military forces from China and four other SCO members (Kazakhstan, Kyrgyzstan, Russia, and Tajikistan) engaged in a larger, two-phase exercise that took place in eastern Kazakhstan and western Xinjiang in mid-August 2003.<sup>32</sup>

### **Hong Kong and China: Economic Partnership and Political Friction**

As the 2004 Hong Kong Policy Act report notes: "U.S. interests in Hong Kong remain substantial. U.S. trade, investment, and business with Hong Kong, the world's 11th largest trading entity and 13th largest banking center, flourish in a largely open environment. In 2003, U.S. exports to Hong Kong totaled USD 13.5 billion, making Hong Kong our 14th largest overseas export market. U.S. direct investment in Hong Kong through 2002 amounted to over USD 35.8 billion. Over 1,000 resident American firms operate in Hong Kong, and Hong Kong is home to an estimated 50,000 American citizens."<sup>33</sup>

In the past year, the Hong Kong Special Administrative Region (SAR) has experienced economic recovery tied to growth in its two largest markets, China and the United States, but its political relationship with China under the "one country, two systems" rubric has become tense. On July 1, 2003, five hundred thousand Hong

Kong people marched in protest of the SAR government's ill-advised introduction of a flawed security bill that was seen as going beyond what was required to implement the Hong Kong Basic Law's requirement, in article 23, to pass laws against such crimes as subversion, sedition, and secession. The SAR government withdrew its bill in the face of these protests and the loss of support from the probusiness Liberal Party members of the Legislative Council.

By the summer of 2003, Chinese leaders viewed these developments with growing concern. One response was to accelerate and finalize negotiations on China's first-ever FTA—the Closer Economic Partnership Arrangement (CEPA) with Hong Kong—as a means of showing China's concern for Hong Kong's economic welfare. CEPA, in effect since January 1, 2004, gives Hong Kong-origin goods and services special access to the Chinese market in advance of WTO liberalization timetables and, in some cases exceeding the benefits of China's WTO accession agreement. Billed as a WTO-consistent FTA, the CEPA does not discriminate on the basis of nationality; foreign, including U.S., firms duly established in Hong Kong are eligible to register as Hong Kong service providers. The CEPA has the potential, not yet realized, of making Hong Kong a more attractive place for certain types of manufacturing and for international service companies.<sup>34</sup>

Despite the PRC's bestowal of CEPA, following the events of July, many Hong Kong people renewed calls for direct elections, seen as offering the best guarantee of a responsive government that would preserve individual rights and protections, such as those the draft security legislation had seemed bound to erode.

The Hong Kong Basic Law provides that the direct election by universal suffrage of the chief executive and all of the Legislative Council should be the ultimate aim. Direct election could be adopted as the method used to select the chief executive as early as 2007 and to form all of the legislature in 2008.<sup>35</sup> The Basic Law requires a two-thirds majority vote by the Legislative Council, approval by the chief executive, and approval of or notification to, in the case of Legislative Council rules the National People's Congress Standing Committee (NPCSC) for any change in the method of selecting the chief executive or forming the Legislative Council.<sup>36</sup> Hong Kong proponents of an early adoption of direct elections have called for direct consultations with the Special Administrative Government on this matter, but the chief executive, C.H. Tung, has declined to do so. Instead, he set up in January 2004 a Task Force on Constitutional Development that has collected views of the public and forwarded them to the NPCSC.

On April 6, 2004, the NPCSC, on its own initiative, issued an interpretation of the Basic Law asserting that only the NPCSC would decide, upon receiving a report from the Hong Kong chief executive, whether any change in electoral processes was needed. It further confirmed that the Legislative Council would not have the right to initiate bills in Hong Kong to establish in local law any new electoral procedures or methods of voting on legislation. Following receipt of a report from Chief Executive Tung recommending a change in electoral procedures, on April 26, 2004, the NPCSC

promptly issued a ruling that in 2007 and 2008, no changes would be made.

This string of decisions has been met with dismay by Hong Kong advocates of greater democracy.<sup>37</sup> Beijing set an ominous precedent by preemptively intruding on governance issues that could easily have been considered within the competency of the Hong Kong SAR. By ruling as it did, the NPCSC shut out the Legislative Council from the early stage of deciding whether changes in electoral rules are necessary as well as the later implementation phase should any change be approved in principle by the NPCSC. This move ensured total control of the process by Beijing. China's foreign ministry has brushed away critical comments on the NPCSC action, including statements by the U.K. and U.S. governments. China insists that the National People's Congress has the ultimate authority to interpret the Basic Law, a national law of the PRC, and that the matter is completely an internal one.

Emphasizing the point, Beijing's representative in Hong Kong declared in early May that "any move by Legislative Councilors in Hong Kong to advance motions to voice discontent or condemn the April 26 decision is against the law. . . . [It] cannot be questioned or challenged."<sup>38</sup> This shutting off of debate coincided with a visit to Hong Kong by eight PLA Navy warships—the largest Chinese flotilla sent to Hong Kong since the 1997 handover. Combined with Beijing's campaign to discredit democratic activists as unpatriotic, these moves constitute a clear campaign of intimidation.

Questions are consequently being raised in Hong Kong and elsewhere about whether Beijing's actions have undermined the high degree of autonomy envisioned under the Sino-British Joint Declaration of 1984 and the Hong Kong Basic Law and the principle of "one country, two systems." As a matter of U.S. policy, the question could well arise whether the provisions of section 202 of the U.S. Hong Kong Policy Act should be invoked: "... whenever the President determines that Hong Kong is not sufficiently autonomous to justify treatment under a particular law of the United States, or any provision thereof, different from that accorded the People's Republic of China, the President may issue an Executive Order suspending the certification of section 201 (a) [regarding continued separate application of U.S. laws with respect to Hong Kong]."<sup>39</sup>

It remains to be seen whether the PRC government will try to erode further Hong Kong's autonomy, such as by intervening in the question of article 23 (security) legislation, and to what degree the Hong Kong populace resists. Additional poorly judged moves by Beijing could have the effect of damaging Hong Kong's business environment, and U.S. long-term interest in an open and prosperous Hong Kong could well suffer. The bond rating agency Moody's, in a May 2004 report, cited doubts over whether Beijing will support democracy in Hong Kong even in future years as a reason the agency might downgrade Hong Kong's credit rating to be on a par with China's lower rating.<sup>40</sup> Aside from direct economic and trade interests in Hong Kong, the United States has an inherent interest in the protection of individual rights and the development of democracy in Hong Kong and also seeks Hong Kong's support in the global fight against terrorism, maintains a cooperative inter-

national law enforcement relationship, and continues to obtain access to Hong Kong as a port of call for U.S. ships and aircraft.

### **Cross-Strait Relations: Economic Ties Grow, Political Tensions Rise**

Since China and Taiwan's respective entries into the WTO, cross-strait economic integration has accelerated despite the lack of direct transport links. An estimated sixty thousand Taiwan-owned firms operate on the mainland, with a total stock of FDI estimated between \$70 billion and \$100 billion. In 2003, China was the destination for more than half of the island's total overseas investment, \$7.7 billion. Meanwhile, Taiwan's total inward FDI declined to \$3.58 billion in 2003 from \$7.61 billion in 2000. Nearly seven thousand factories were shut down in Taiwan in 2003, more than double the 2002 figure.<sup>41</sup>

Although exact numbers are difficult to calculate due to the role of intermediate channels, Taiwan has probably provided the greatest single stream of FDI into China during the past decade. The progressive migration of industries (including most segments of its vital information technology industry) out of Taiwan to coastal China is seen as contributing to historically high unemployment in Taiwan which reached 5.2 percent in August 2003, though dropping to 4.3 percent in April, 2004. Even as investment flows from Taiwan to the mainland continued at high levels, gross domestic investment on Taiwan hit a four-year low of \$48.2 billion in 2002.<sup>42</sup> It recovered slightly in 2003, to about \$48.6 billion. These numbers contribute to a widespread impression that Taiwan business is not reinvesting on the island, preferring mainland alternatives.

Taiwan and PRC government statistics on cross-strait trade differ. Transshipments of goods via Hong Kong, underreporting in Taiwan, and overreporting in the mainland are probably the reasons for this. Nonetheless, sides' numbers show China has become Taiwan's top trading partner in 2003. The PRC claims two-way trade reached more than \$58 billion in 2003,<sup>43</sup> whereas the Taiwan Board of Foreign Trade announced March 1 that total cross-strait trade was \$46.3 billion, with Taiwan enjoying a \$24.4 billion surplus on exports of \$35.4 billion.<sup>44</sup> China has become Taiwan's largest export market, surpassing the United States in 2002 and 2003.

Taiwan's exports to the mainland increased by twenty percent in 2003. They accounted for 34.51 percent of Taiwan's total exports, up from 23.97 percent in 2000, according to Taiwan's economic ministry. Professor Peter Chow of the City University of New York refers to this state of affairs as Taiwan's asymmetric trade dependence on China's market, as China's exports to Taiwan in recent years have amounted to only about two to three percent of the PRC's total exports.<sup>45</sup>

In the information technology sector, Taiwan semiconductor and electronics manufacturing firms are major global actors, and their expansion into China continues, but without noticeable erosion of Taiwan equity control. In testimony before the Commission, Merritt Cooke, former senior commercial officer at the American Institute in Taiwan, attributed this to the relative stability of "highly differentiated, high-value supply chains" as opposed to the "instability of far simpler manufacturer-retailer networks characteristic

of commodity products.” Cooke believes this distinction helps explain the historical pattern of Taiwan investment into the mainland. While many light industry sectors that Taiwan moved to the mainland in the 1980s and 1990s “have been swallowed up by mainland competitors,” highly differentiated, relatively high-value consumer products such as brand-name athletic shoes and high-performance bicycles have remained largely in Taiwan equity hands. “If these product sectors, with their relatively lower levels of technology and slower product cycles, could stay in Taiwan control for decades, there is every reason to believe that the various IT [information technology] hardware sectors will stay even more firmly in Taiwan’s grip in years ahead,” Cooke said.<sup>46</sup>

Despite the large and growing Taiwan business presence in the mainland and burgeoning indirect cross-Strait trade and investment, there is a sense in the Taipei business community that Taiwan itself—as a venue for investment, manufacturing, logistics, or finance—is in danger of becoming marginalized within Asia. Kaohsiung’s container port—once the fourth busiest in the world—now ranks sixth, with the Chinese ports of Shenzhen and Shanghai jumping ahead. The American Chamber of Commerce in Taiwan reports that a number of U.S. corporations’ regional headquarters in Taiwan have been eliminated or downgraded to local offices.<sup>47</sup>

### ***PRC’s Campaign to Isolate Taiwan***

The growing sense of marginalization is intensified by the PRC’s determination to exclude Taiwan from multilateral forums and the work of international organizations. Beijing’s initial move to block visits by World Health Organization officials to Taiwan in the spring of 2003, during the height of the SARS (severe acute respiratory syndrome) crisis, was an extreme example of this, but repeated in large and small ways around the world. China has fought over Taiwan government nomenclature submitted in WTO technical documents.<sup>48</sup> Beijing is widely believed to have used its political and economic leverage to dissuade other countries in the region from entering into FTA negotiations with Taiwan. Taiwan’s first and so far only FTA was signed in August 2003 with Panama, one of the twenty-six countries that extend diplomatic recognition to Taiwan; Panama ranks seventieth among Taiwan’s trading partners. Taiwan traders and business people are concerned that China is using its ASEAN FTA and Hong Kong CEPA initiatives to encroach further on Taiwan’s economic and commercial space.<sup>49</sup>

In talks with Taiwan and U.S. business executives in March, Commissioners heard suggestions that the United States should consider reviving the process of negotiations on a U.S.-Taiwan Free Trade Agreement (FTA), if only to signal to others in the region that the United States is interested in helping Taiwan break out of its growing economic isolation. The United States has suspended bilateral trade negotiations pending substantial progress by Taiwan on a number of existing trade barriers to U.S. producers—including in the area of intellectual property protection, pharmaceuticals, telecommunications services, and agricultural products. Taiwan reportedly is making some progress in meeting U.S. concerns in some of these areas.

The other major factor behind the sense of marginalization is the loss of momentum to establish direct trade, transport, and communications links (the “Three Links”) across the Taiwan Strait. As China becomes more central to Asia’s regional economy and global supply chains, the lack of direct links across the Strait constrains Taiwan from taking advantage of its geographical proximity to the fastest-growing large economy in the world. In years past, Taiwan management skills and technology were highly prized by developing mainland coastal regions, and China took the initiative to foster the idea of early agreement on the Three Links. It is not evident that China has the same incentives to promote direct links, even as it senses a heightened interest in them within the Taiwan business community.

For more than six years, there has been little public dialogue on the Three Links, or on any other matter, between the two sides of the Strait. Taiwan President Chen Shui-bian’s unilateral initiative to establish the “mini-Three Links” between Taiwan’s small offshore islands of Kinmen and Matsu and neighboring mainland ports has not led to more than local exchanges of visitors and goods. During Chen’s first term, China initially refrained from moving any distance toward Chen’s position on dialogue. Beijing insisted that any talks even on technical subjects like maritime trade, could be conducted only after Chen’s government accepted the PRC’s “one China principle” that there is only one China in the world and that Taiwan is a part of China. Chen refused to accept preconditions, and the one China principle goes against his own policy statements that, while the possibility of a future one China exists in theory, one China does not exist now, and that Taiwan, as the Republic of China, is an independent sovereign state separate from the PRC.

China has more recently suggested it would be willing to sponsor unofficial talks on technical issues, but Chen, citing legal strictures against nonofficials negotiating on behalf of the government, has been unwilling to countenance a Taiwan delegation that was not led by responsible officials of his government.

### ***Taiwan Election: Identity Politics Wins, Cross-Strait Tension Rises***

The dramatic March 20, 2004, presidential election in Taiwan—with the election eve shooting of Taiwan President Chen and Vice President Lu, the extremely narrow margin of Chen Shui-bian’s election victory, and the postelection lawsuits and contentions raised by the opposition “Pan-Blue” KMT–FPF alliance—has frozen the cross-Strait situation for now. It is clear from public statements of President Chen and his advisors that he would like to make improvement of cross-Strait relations a high priority for his second and last term in office, with a focus on establishing a framework of peace and stability that would lead to negotiations on both political relations and practical matters such as the Three Links.<sup>50</sup> Yet such statements are negated, in the mind of Beijing leaders, by Chen’s expression of pride that his narrow victory is a vindication of identity politics in Taiwan and is a mandate for solidifying Taiwan’s separate status.

Following the election, President Chen's repeated public references to Taiwan as an independent, sovereign country and his promise to initiate constitutional reforms or amendments in the 2006–08 time frame give no comfort to leaders in Beijing, who suspect that Chen is determined to formalize Taiwan's independence. A senior PRC Taiwan Affairs Office spokesman publicly condemned Chen as stubbornly insisting on a Taiwan independence separatist stance and further claimed Chen's "actions have ruined Taiwan society, damaged cross-Strait relations, and posed a direct threat to peace and stability in the Asia-Pacific region."<sup>51</sup>

Chen and his government will be walking a tightrope as they seek to solidify the Taiwan people's freedoms and democracy, maintain adequate defenses against PRC coercion, and revive cross-Strait dialogue while preserving good relations with Taiwan's strongest supporter, the United States. Chen's May 20, 2004, inaugural address will be a guide to his second-term, cross-Strait policies and will be read meticulously by all concerned in Beijing and Washington.

### ***Changing Cross-Strait Realities; U.S. Policy***

The cross-Strait situation of the past six months has been characterized by crisis management. Beijing issued official denunciations of Taiwan's passage of a referendum law in November 2003 and of Taiwan President Chen Shui-bian's plan to put forward referendum questions to be voted on during the March 20, 2004, presidential election. PLA military exercises on the China coast opposite Taiwan and the April 2004, arrest of Major General Liu Guangzhi, the former head of the PLA Air Force Command College, for spying for Taiwan added to a potentially dangerous string of events that cumulatively could have sparked military conflict.

The response of the United States to these events shows how convoluted U.S. cross-Strait policy has become since the framework was established twenty-five years ago. This was evident during President Bush's meeting in Washington with PRC Premier Wen Jiabao on December 9, 2003, at a time when it was perceived that Chen Shui-bian was considering posing referendum questions that would relate to Taiwan independence or unification with the mainland. Speaking to the press, President Bush said, "The United States Government's policy is one China, based upon the three communiqués and the Taiwan Relations Act. We oppose any unilateral decision by either China or Taiwan to change the status quo." The president reportedly reaffirmed in private to Premier Wen his administration's firm opposition to the use of force against Taiwan, but he told the press that "the comments and actions made by the leader of Taiwan indicate that he may be willing to change the status quo, which we oppose."<sup>52</sup>

The referendum questions that finally were posed to Taiwan voters in March 2004—on the need for spending on missile defenses and for initiating government to government talks with the PRC—did not touch on the question of Taiwan's status. In any event, they did not obtain the necessary majority of registered voter participation in order to pass. Nonetheless, President Chen's proposal for constitutional revision—most likely through a referendum to take place in 2006—is likely to be met by additional PRC pressure to

pull Taiwan back from steps that Beijing believes could lead to Taiwan's permanent separation. Chen has insisted his constitutional proposals—not yet fully formed—will be designed to improve the functioning of Taiwan's government and not to change the status quo.<sup>53</sup>

The United States has a continuing interest in peace and security in the Taiwan Strait and encourages cross-Strait dialogue. Since President Bush's December 9, 2003, remarks, senior U.S. officials have continued to urge both sides not to take unilateral measures to change the status quo as defined by the United States. For example, in recent testimony before the House International Relations Committee, Assistant Secretary of State James Kelly made clear that "[T]he U.S. does not support independence for Taiwan or unilateral moves that would change the status quo as we define it."<sup>54</sup>

The United States' one China policy—which is based principally on the three Sino-U.S. communiqués and the Taiwan Relations Act—is challenged by recent developments across the Taiwan Strait. Taiwan's evolution into a viable, constitutionally based democracy, with the full panoply of democratic practices and institutions, including heavy participation in elections, is in stark contrast to the continuation of an authoritarian, one-party state on the mainland. Beijing continues to assert that Taiwan must be united with the mainland, and although it professes it prefers unification be obtained peacefully, Beijing has never ruled out the use of force to compel Taiwan. The PRC poses an increasing military threat to Taiwan through its missile deployments and military modernization program, which are clearly shaped both to apply coercive force and to fit a future Taiwan conflict scenario. See Chapter 8 for detailed findings on China's military modernization and the cross-Strait military balance.

In view of U.S. commitments under the 1979 Taiwan Relations Act (TRA) to provide Taiwan with the wherewithal to defend itself and to view with grave concern any attempt to resolve the Taiwan issue by coercion or military force, the United States cannot presume that the currently frozen cross-Strait situation serves long-term U.S. national interests. China's growing military power and its increased economic and political clout in the region have altered the cross-Strait strategic balance. Taiwan's politics have also changed the picture, as the results of the presidential election have, in the mind of the Democratic Progressive Party leadership, vindicated Chen Shui-bian's emphasis on Taiwan sovereignty and separate identity. The fact remains that the PRC does not exercise any operational, political, or economic jurisdiction or sovereignty over Taiwan. On the other hand, the United States does not recognize any de jure independent political sovereignty on the part of Taiwan but is committed under the TRA to resist any attempt by the PRC to incorporate Taiwan into its political orbit by force or to compel a change to its economic and social systems.<sup>55</sup>

The United States should consider new approaches to help China accept the realities of the present situation and work to loosen the strictures China has placed on Taiwan internationally while facilitating some form of cross-Strait dialogue that could lead to direct links between Taiwan and the mainland. The hope would be that

once such a dialogue was established, particularly in view of the extensive economic ties between the two sides, it could lead to broader confidence-building measures.

## **RECOMMENDATIONS**

### ***Regional Engagement***

- The Commission recommends that Congress revitalize U.S. engagement with China's Asian neighbors by encouraging U.S. diplomatic efforts to identify and pursue initiatives to demonstrate the United States' firm commitment to facilitating the economic and security needs of the region. These initiatives should have a regional focus and complement bilateral efforts. The Asia-Pacific Economic Cooperation forum (APEC) offers a ready mechanism for pursuit of such initiatives. The United States should consider further avenues of cooperation by associating with regional forums of which it is not a member.

### ***Hong Kong***

- The Commission recommends that Congress consult with the administration to assess jointly whether the PRC's recent interventions impacting Hong Kong's autonomy constitute grounds for invoking the terms of the U.S.-Hong Kong Policy Act with regard to Hong Kong's separate treatment. This includes U.S. bilateral relations with Hong Kong in areas such as air services, customs treatment, immigration quotas, visa issuance, and export controls. In this context, Congress should assess the implications of the National People's Congress Standing Committee's intrusive interventions with regard to matters of universal suffrage and direct elections. Congress and the administration should continue to keep Hong Kong issues on the U.S.-PRC bilateral agenda and work closely with the United Kingdom on Hong Kong issues.

### ***Cross-Strait Issues***

- The Commission recommends that Congress enhance its oversight role in the implementation of the Taiwan Relations Act. Executive branch officials should be invited to consult on intentions and report on actions taken to implement the TRA through the regular committee hearing process of the Congress, thereby allowing for appropriate public debate on these important matters. This should include, at a minimum, an annual report on Taiwan's request for any military equipment and technology and a review of U.S.-Taiwan policy in light of the growing importance of this issue in U.S.-China relations.
- The Commission recommends that the Congress and the administration conduct a fresh assessment of the one China policy, given the changing realities in China and Taiwan. This should include a review of:
  - The policy's successes, failures, and continued viability;
  - Whether changes may be needed in the way the U.S. government coordinates its defense assistance to Taiwan, including the need for an enhanced operating relationship between U.S. and Taiwan defense officials and the establishment of a U.S.-Taiwan hotline for dealing with crisis situations;

- How U.S. policy can better support Taiwan's breaking out of the international economic isolation that the PRC seeks to impose on it and whether this issue should be higher on the agenda in U.S.-China relations. Economic and trade policy measures that could help ameliorate Taiwan's marginalization in the Asian regional economy should also be reviewed. These should include enhanced U.S.-Taiwan bilateral trade arrangements that would include protections for labor rights, the environment, and other important U.S. interests.
- To support this policy review, the Commission recommends that the appropriate committees of Congress request that the executive branch make available to them a comprehensive catalogue and copies of all the principal formal understandings and other communications between the United States and both China and Taiwan as well as other key historical documents clarifying U.S. policy toward Taiwan.
- The Commission recommends that Congress consult with the administration on developing appropriate ways for the United States to facilitate actively cross-Strait dialogue that could promote the long-term, peaceful resolution of differences between the two sides and could lead to direct trade and transport links and/or other cross-Strait confidence-building measures. The administration should be directed to report to Congress on the status of cross-Strait dialogue, the current obstacles to such dialogue, and, if appropriate, efforts that the United States could undertake to promote such a dialogue.

#### ENDNOTES

1. U.S.-China Economic and Security Review Commission, *Hearing on China's Growth as a Regional Economic Power: Impacts and Implications*, testimony of Bates Gill, December 4, 2003, p. 5.

2. China's joining the Asian "Shift Toward Regionalism" is outlined in the written testimony of Richard Feinberg and Stephen Haggard for the U.S.-China Economic and Security Review Commission, *Hearing on China as an Emerging Regional and Technology Power: Implications for U.S. Economic and Security Interests*, February 12–13, 2004, pp. 64–70.

3. Michael Vatikiotis and Murray Heibert, "How China is Building an Empire," *Far Eastern Economic Review* (November 20, 2003). See also Phillip P. Pan, "China's Improving Image Challenges U.S. in Asia," *Washington Post*, November 15, 2003.

4. U.S.-China Economic and Security Review Commission, *Hearing on China's Growth as a Regional Economic Power: Impacts and Implications*, testimony of John J. Tkacik, December 4, 2003, p. 15.

5. Top Asian sources of FDI to China, 2001: Hong Kong, 36.0 percent; Japan, 9.8 percent; Taiwan, 6.7 percent; Singapore, 4.6 percent; South Korea, 4.2 percent. A significant portion of Hong Kong investment and most of the 10.8 percent of FDI listed as sourced from the Virgin Islands is probably attributable to Taiwan. Source: Ministry of Foreign Trade and Economic Cooperation and U.S.-China Business Council, as cited in Allen Lenz, "World Trade and Investment: An Overview" (report prepared for the U.S.-China Economic and Security Review Commission [Washington, DC: October 2003]).

6. U.S.-China Economic and Security Review Commission, *Hearing on China's Growth as a Regional Economic Power: Impacts and Implications*, testimony of Wing Thy Woo, December 4, 2003, p. 25.

7. U.S.-China Security Review Commission, *Report to Congress: The National Security Implications of the Economic Relationship between the United States and China* (Washington, DC: July 2002), p. 37.

8. *Country Fact Sheet: China*, (Geneva, Switzerland: UN Conference on Trade and Development.) Available at [www.unctad.org/wir](http://www.unctad.org/wir).

9. U.S.-China Economic and Security Review Commission, *Hearing on China's Industrial, Investment, and Exchange Rate Policies: Impact on the U.S.*, testimonies of Peter Nolan and Edward Steinfeld, September 25, 2003, pp. 98–144.

10. See figure 4.1, *Leading Exporters and Importers in World Merchandise Trade, 2002 & 2003*, World Trade Organization. Available at [www.wto.org/english/news\\_e/pr373\\_e.htm](http://www.wto.org/english/news_e/pr373_e.htm).

11. "China Doubles its Trade Deficit with South Korea," *Asia Pulse/Yonhap*, April 2, 2004.

12. "China-ASEAN Trade Records New High," *Xinhuanet*, February 8, 2004. Available at [news.xinhuanet.com/english/2004-02/08](http://news.xinhuanet.com/english/2004-02/08).

13. U.S.-China Economic and Security Review Commission, *Hearing on China's Growth as a Regional Economic Power: Impact and Implications for the U.S.*, testimony of Edward Lincoln, December 4, 2003, pp. 82–88.

14. Commission discussions with Japanese business representatives in Tokyo, March 2004.

15. U.S.-China Economic and Security Review Commission, *Hearing on China's Growth as a Regional Economic Power: Impact and Implications for the U.S.*, testimony of Gordon Flake, December 4, 2003, p. 98.

16. The preceding paragraph draws heavily on Scott Snyder, "No Shows, Economic Growth, and People Problems," *Comparative Connections*, ejournal of CSIS Pacific Forum, 4th quarter, 2003. Available at [www.csis.org/pacfor/cc/0304Qchina\\_skorea.html](http://www.csis.org/pacfor/cc/0304Qchina_skorea.html).

17. See, for example, U.S.-China Economic and Security Review Commission, *Hearing on China's Growth as a Regional Economic Power: Impact and Implications for the U.S.*, testimony of Wing Thye Woo and Naoko Munakata, December 4, 2003, pp. 16–35 and pp. 104–127.

18. U.S.-China Economic and Security Review Commission, *Hearing on China's Growth as a Regional Economic Power: Impact and Implications for the U.S.*, testimony of Wing Thye Woo, December 4, 2003, pp. 23–24; see also Yongzheng Yang, "China's Integration into the World Economy: Implications for Developing Countries," *International Monetary Fund Working Paper, WP/03/245* (Washington, DC: IMF, December 2003).

19. U.S.-China Economic and Security Review Commission, *Hearing on China's Growth as a Regional Economic Power: Impact and Implications for the U.S.*, testimony of Naoko Munakata, December 4, 2003.

20. Bruce Klingner, "'Peaceful Rising' Seeks to Allay 'China Threat,'" *Asia Times Online*, March 12, 2004.

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37. See, for example, “Hong Kong Leader Calls for Calm After China Rules Out Full Democracy,” *Agence France Presse*, April 26, 2004; see also Yash Ghai, “Interpreting the Basic Law is Not What it Seems,” *Apple Daily*, April 26, 2004, available at [www.clearharmony.net](http://www.clearharmony.net); Jonathan Watts, “Hong Kong Democrats Angered by Beijing’s Interference in Reform,” *Guardian*, April 7, 2004; and Michael Ng, “No One Can Stop Beijing,” *The Standard*, Hong Kong, April 5, 2004.

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39. See 22 U.S.C. 66, U.S.-Hong Kong Policy Act of 1992.

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48. Robert Marquand, “China Throwing Diplomatic Elbows to Isolate Taiwan,” *Christian Science Monitor*, December 19, 2003. Available at [www.csmonitor.com/2003/1219/p07s02-woap.html](http://www.csmonitor.com/2003/1219/p07s02-woap.html).

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51. “Text of PRC’s Taiwan Affairs Office News Conference on Taiwan Election,” *Beijing CCTV-4* (in Mandarin). Foreign Broadcast Information Service, translated English text, ref. no. CPP20040414000027 Beijing CCTV-4 in Mandarin, April 14, 2004.

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54. See statement of James Kelly, assistant secretary of State, before the House International Relations Committee, April 21, 2004.

55. See especially section 2(b)(6) and section 3(c), Taiwan Relations Act of 1979, 22 U.S.C. 3301. Section 2(b)(6): “It is the policy of the United States—to maintain the capacity of the United States to resist any resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan.” Section 3(c): “The President is directed to inform the Congress promptly of any threat to the security or the social or economic system of the people on Taiwan and the danger to the interests of the United States arising therefrom. . . .”

**CHAPTER 5**  
**CHINA'S PROLIFERATION PRACTICES**  
**AND THE CHALLENGE OF NORTH KOREA**

*“PROLIFERATION PRACTICES. The Commission shall analyze and assess the Chinese role in the proliferation of weapons of mass destruction and other weapons (including dual-use technologies) to terrorist-sponsoring states, and suggest possible steps which the United States might take, including economic sanctions, to encourage the Chinese to stop such practices.” [P.L. 108-7, Division P, Sec. 2(c)(2)(A)]*

**KEY FINDINGS**

- China's assistance to weapons of mass destruction (WMD)-related programs in countries of concern continues, despite repeated promises to end such activities and the repeated imposition of U.S. sanctions. The Chinese government and Chinese enterprises have assisted such states to develop their nuclear infrastructure, chemical weapons capabilities, and/or ballistic missile systems notwithstanding a consistent history of denials. Libya's decision to open up its WMD programs, and the revelations by Pakistan that A.Q. Khan supplied uranium enrichment technology to Libya, Iran, and North Korea, provides new insight into China's legacy of proliferation. China's continued failure to adequately curb its proliferation practices poses significant national security concerns to the United States.
- The dangers posed by the North Korean nuclear weapons program are of grave concern for regional security, and global non-proliferation policies and actions and are exacerbated by a lack of real progress in the Six Party Talks. The extent of Chinese cooperation in those negotiations to achieve a complete, verifiable, and irreversible dismantlement of North Korea's nuclear weapons programs is a critical test of the U.S.-China relationship. Nevertheless, the closed nature of North Korea means intelligence assessments must be judged with caution. As U.S. intelligence estimates of North Korea's nuclear weapons capabilities increase, so too does the urgency for a resolution of the stalemate that has characterized those talks to date. Reports now indicate that North Korea may have reprocessed eight thousand spent fuel rods. This could provide enough plutonium to produce approximately nine weapons in addition to the one to two weapons the North already is believed to possess. China's efforts to convene the Six Party Talks are a commendable preliminary step, but Beijing does not appear to have used its substantial leverage to persuade North Korea to dismantle all elements of its nuclear weapons program.
- It appears that U.S. and Chinese goals for the Six Party Talks are not identical, given recent Chinese public statements that the

United States should modify its negotiating position. Furthermore, a fully developed strategy has not yet been developed for a reasonably staged process of steps, starting with a freeze of North Korea's nuclear programs and ending with irreversible dismantlement under an extensive verification regime. The Commission is concerned that the United States has not presented a detailed plan that puts pressure on North Korea to begin serious negotiations and that presses China to use its leverage on North Korea to negotiate and implement an agreement.

- China continues to permit North Korea to use its air, rail, and seaports to trans-ship ballistic missiles and WMD-related materials. North Korean officials recently stated they do not intend to curtail missile trade, as it provides badly needed foreign exchange. This is contrary to Beijing's stated position that it seeks to curtail this dangerous proliferation activity. China has not applied sufficient pressure on North Korea to stop these exports.
- The need for China's cooperation in resolving the North Korean nuclear crisis has been cited by commentators as a reason the United States has softened its position regarding other outstanding U.S.-China trade and economic disputes. The Commission believes that it is as much in China's national interests as it is in the U.S. national interest to achieve a nuclear-free Korean Peninsula without additional, nonrelated concessions or other inducements. Nevertheless, the expected benefits to the United States from China's cooperation in the Six Party Talks do not appear to have been forthcoming. North Korea's assertions that it is now moving forward with its weapons development programs, both qualitatively and quantitatively, should be taken seriously, with all the attendant risks for U.S. national security interests, regional stability, and global nonproliferation goals.

#### OVERVIEW

In its 2002 Report to Congress, the Commission stated that China's transfers of technology and components for WMD and their delivery systems to countries of concern, including certain designated terrorist-sponsoring nations, was helping to create a new tier of nations with the capability to produce weapons of mass destruction and ballistic missiles. Since that time, recent events unfortunately have confirmed this warning. Clearly, China is a key to stopping this proliferation.<sup>1</sup>

Chinese supplies of technology and components for weapons of mass destruction and their delivery systems to countries of proliferation concern continue to pose significant security issues for the United States. China's cooperation with Pakistan and Iran in nuclear and missile-related technologies; Beijing's continued economic support for North Korea and whether it will choose to exert its substantial economic leverage to help achieve a complete, verifiable, and irreversible dismantlement of North Korea's nuclear program; and whether China will effectively implement and enforce its export regulations to stem proliferation all remain grave security issues for the future of U.S.-China relations.

The Commission held a hearing on July 24, 2003, examining *China's Proliferation Practices and the Challenge of North Korea*. This hearing took place against the backdrop of a developing nuclear cri-

sis on the Korean Peninsula after North Korea admitted it secretly had resumed a nuclear weapons development program based on uranium enrichment. The Commissioners heard testimony from current and previous administration officials, as well as outside experts, on China's proliferation practices and its role as an intermediary in the Six Party Talks that are aimed at defusing the North Korean crisis.

#### ANALYSIS AND FINDINGS

##### **Proliferation Is Ongoing**

The all-too-real possibility that WMD will be acquired and used by terrorists is of the gravest concern for U.S. national security, unlike the Cold War era, when the prospect of mutual assured destruction between nuclear states made nuclear conflict ultimately unthinkable. The current era is characterized by concerns about transfers of WMD-related materials between states and nonstate actors. Today's challenge is to keep nuclear, chemical, and biological weapons out of the hands of terrorists and rogue nations that are willing to use any means to achieve their goals.

The consequence of more than twenty years of China's direct transfers, as well as associated re-transfers of WMD and related technologies, is that the United States now faces enhanced threats from rogue states or terrorist groups that can acquire WMD capabilities. Unfortunately, even in light of overwhelming evidence of the increased threat to global security, Chinese entities continue to proliferate. This activity calls into question the effectiveness of the U.S. government's pursuit of a partnership with Beijing in counterterrorism efforts or in resolving the crisis on the Korean Peninsula. Moreover, the extent to which U.S. actions to address economic and trade disputes with China may be deferred because of hoped for Chinese cooperation in achieving these U.S. security objectives is of concern. There is a risk in deferring such actions while the level of China's cooperation on counterterrorism and the North Korean crisis is an open question.

The history of Chinese proliferation behavior is one of broken promises during several decades. For years, China transferred ballistic and cruise missiles capable of acting as WMD delivery systems, missile technology, and missile-related components (especially dual-use items) to countries with troubling proliferation records such as Pakistan, Libya, Iran, and North Korea despite U.S. protests and the imposition of sanctions on numerous occasions.<sup>2</sup> Since 1992, the United States has expressed ongoing concern with regard to China's noncompliance with its nuclear commitments and its numerous pledges to the United States with respect to missile proliferation. The United States also believes that China retains undeclared chemical and biological weapons capability inconsistent with its Chemical Weapons Convention (CWC) and Biological Weapons Convention (BWC) obligations.

In contrast to the 1990s, Chinese transfers have evolved from sales of complete missile systems, to exports of largely dual-use nuclear, chemical, and missile components and technologies.<sup>3</sup> While this change represents a quantitative decrease, qualitatively these transfers are equally worrisome. The shift from complete systems to components and technologies continues to raise significant con-

cerns about the extent to which these exports are improving the WMD-related capabilities of recipient countries.<sup>4</sup> Recent activities “have aggravated trends that result in ambiguous technical aid, more indigenous capabilities, longer range missiles, and secondary (retransferred) proliferation.”<sup>5</sup> Continuing intelligence reports indicate that Chinese cooperation with Pakistan and Iran remains an integral element of China’s foreign policy.<sup>6</sup>

As recently as April 1, 2004, the United States imposed sanctions on five Chinese entities for exports to Iran of items that have the potential to make a material contribution to Iran’s WMD or missile capabilities. Several entities such as China North Industries Corporation (NORINCO), a state defense industrial firm, and its subsidiaries, and China Precision Machinery Import/Export Corporation (CPMIEC) have been sanctioned multiple times. NORINCO and any successor, subunit, or subsidiary was sanctioned under the Iran Non-proliferation Act of 2000 twice in 2003 and again in 2004. CPMIEC or its parent, for example, was sanctioned in 1991, 1993, 2002, 2003, and 2004 for missile-related transfers to Iran and/or Pakistan. (See Appendix A for history of U.S. sanctions against the PRC.)

In the summer and fall of 2002, Beijing issued a comprehensive set of export control regulations and control lists. But, at the same time that China was providing its first national training course on the new, missile-related export regulations in February 2003, Chinese entities continued to work with Pakistan and Iran on ballistic missile-related projects, were primary suppliers of advanced conventional weapons to Pakistan and Iran, and provided dual-use chemical weapons-related production equipment and technology to Iran.<sup>7</sup> In testimony to the Senate Select Committee on Intelligence in February 2004, CIA Director George Tenet stated that “although Beijing has taken steps to improve ballistic missile related export controls, Chinese firms continue to be a leading source of relevant technology and continue to work with other countries on ballistic missile-related projects.”<sup>8</sup> Reporting to Congress in mid-2003, the CIA stated that “firms in China provided dual-use missile-related items, raw materials, and/or assistance to . . . countries of proliferation concern such as Iran, Libya, and North Korea.”<sup>9</sup>

One key issue for the United States is the ability to determine the true relationship of proliferating entities in China and the Chinese government, and the extent to which the Chinese government is aware of these transfers.<sup>10</sup> Some analysts argue that because China is such a large country, the Chinese government may be unaware of the activities of each Chinese entity involved in proliferation. However, the ability of serial proliferators such as NORINCO, which is a state-owned entity, to continue to operate, calls into question China’s commitment to enforcing its export control laws. Beijing’s failure to control such transfers gives the appearance that these are allowed in accordance with an unstated national policy.

China has generally tried to avoid making fundamental changes in its transfer policies by offering the United States carefully worded commitments<sup>11</sup> or exploiting differences between agreements. With respect to nuclear nonproliferation, China joined the Zangger Committee in 1997, which requires item-specific safeguards, but not the Nuclear Suppliers Group (NSG), which requires full-scope

safeguards. The NSG covers exports of dual-use items, a major difference between it and Zangger and covers not just equipment and material but also technology for the development, production, and use of listed items. Full-scope safeguards allow for International Atomic Energy Agency (IAEA) inspections and verification of declared nuclear facilities.

Recent news reports indicate that China has applied to join the forty-nation NSG and also is discussing entry into the multilateral Missile Technology Control Regime (MTCR).<sup>12</sup>

China's entry into the MTCR may, however, be met with mixed reaction. MTCR membership could mean greater cooperation in controlling missile proliferation or, alternatively, "membership in MTCR would exempt China from certain sanctions, provide it with intelligence, give it a potentially obstructionist role in decision-making, and relax missile related export controls to China."<sup>13</sup>

China is party to the CWC and the BWC, but not to the Australia Group.<sup>14</sup> China has exploited differences between the CWC and Australia Group control lists to export "chemicals and equipment of proliferation concern to countries such as Iran."<sup>15</sup> China's new export control regulations do contain a "catchall" provision that can be used to restrict the export of items not specifically identified on the control list. But, once again, enforcement will be the key test of Beijing's commitment to restrict its exports.

### **Transfers to Countries of Proliferation Concern**

#### ***China-Pakistan Nuclear Weapons***

Chinese assistance to Pakistan was essential to the development of Pakistan's missile and nuclear programs<sup>16</sup> (see Appendix B). Pakistan's recent admission that its chief nuclear scientist, A.Q. Khan, operated a nuclear arms market and supplied uranium enrichment technology to Libya, Iran, and North Korea confirms the worst—that a huge arsenal of nuclear materiel and technology is now widely diffused without controls. Detailed Chinese nuclear plans initially supplied to Pakistan have been uncovered in Libya, with more discoveries possible. With the Pakistani government's revelations, and Libya's agreement to dismantle its nuclear program, new evidence is surfacing that shows how black market arms purveyors transfer nuclear weapons hardware and technologies from country to country either with government sanction or through underground networks. Although Beijing pledged in 1996 that it would not provide assistance to unsafeguarded nuclear facilities, U.S. intelligence does not "rule out, however, some continued contacts subsequent to the pledge between Chinese entities and entities associated with Pakistan's nuclear weapons program."<sup>17</sup>

China currently is in the process of negotiating the sale of a large, \$700 million nuclear reactor to Pakistan in Chasma. However, Pakistan has refused to open all of its facilities to full-scope IAEA inspections and is not a Nuclear Nonproliferation Treaty (NPT) signatory. Under NSG guidelines, no member is supposed to supply nuclear goods to declared non-nuclear weapon states unless the recipient is willing to open all of its nuclear facilities to full-scope IAEA inspections.<sup>18</sup> Arms control expert Henry Sokolski raises serious concerns about this sale to Pakistan and questions why it should be permitted, even though the agreement would be

grandfathered under the terms of China's accession to the NSG, asking:<sup>19</sup> "Is there any country less qualified financially or in need of buying such a reactor, more able to convert the reactor's fresh or spent fuel quickly into bomb material, or freer of legal constraints to proliferate?"<sup>20</sup>

Chinese entities have helped Pakistan to "move toward domestic serial production of solid-propellant SRBMs and supported Pakistan's development of solid-propellant MRBM's."<sup>21</sup> In the first half of 2003, the CIA reports that China also remained a primary supplier of advanced conventional weapons to Pakistan.<sup>22</sup>

### ***China-Iran Missile and Nuclear Cooperation***

China's continued assistance to Iran,<sup>23</sup> a designated state sponsor of terror, also is extremely troubling. U.S. intelligence reports that entities from China, Russia, and North Korea helped Iran become self-sufficient in ballistic missile production.<sup>24</sup> Iran produces Scud short-range ballistic missiles, is in the late stages of developing the Shahab medium-range ballistic missile, and is pursuing longer-range missiles.<sup>25</sup> Chinese entities continue to assist Iran with dual-use missile-related items, raw materials, and chemical weapons-related production equipment and technology as of the CIA's most recent unclassified reporting that covers the period from January through June of 2003.<sup>26</sup>

In October 1997, China agreed to end cooperation with Iran on supplying a uranium conversion facility, not to enter into any new nuclear cooperation with Iran, and to bring to conclusion within a reasonable period of time two existing projects.<sup>27</sup> But concerns remain within the intelligence community, as of the first half of 2003, that Chinese firms continued to cooperate with Iran in the nuclear field.<sup>28</sup>

According to news reports, "An Iranian opposition group found that Iranian front companies procured materials from China (and other countries) for secret nuclear weapons facilities."<sup>29</sup> It also was reported last year that in Iran "about fifty Chinese experts have been observed at a uranium mine at Saghand, and North Korean and Chinese experts supervised the installation of centrifuge equipment to enrich uranium near Isfahan."<sup>30</sup>

The United States is convinced that Iran is "pursuing a clandestine nuclear weapons program based on both enriched uranium and low burn up plutonium."<sup>31</sup> After enormous pressure from the international community and the IAEA, Iran has agreed to demands that its nuclear program be open for inspections and that it halt its uranium enrichment and reprocessing activities. The IAEA cited Russia, China, and Pakistan as "probable suppliers of the technology Iran used to enrich uranium."<sup>32</sup>

### ***Energy Security***

One potential explanation for China's history of proliferation to countries such as Iran, Iraq, and Libya, countries that have been on the State Department's list of terrorist sponsors is China's growing dependence on Middle East oil.<sup>33</sup>

China is a net importer of oil, and its need for foreign oil is expected to double by 2010. This need for energy security may help explain Beijing's history of assistance to terrorist-sponsoring states, with various forms of WMD-related items and technical assistance,

even in the face of U.S. sanctions. Such assistance to Iran appears to be ongoing.

Some research indicates that China's sales of arms-related material and technologies have not only been for hard currency but also for favorable oil concessions. Iran, for example, exported 12.4 million tons of crude oil to China in 2003.<sup>34</sup> The Zhuhai Zhenrong Corporation, a spin-off of NORINCO, a Chinese government-owned weapons producer and serial proliferator currently under sanction, has agreed to purchase \$20 billion worth of liquefied natural gas from Iran over twenty-five years and is expected to complete deals to develop three Iranian oil fields.<sup>35</sup> Sinopec Group, China's state-owned petrochemical company, which already has an oil project in Iran, is holding talks with the Iranian government to purchase liquefied natural gas. Analysts say this would be an important coup for Iran in the face of U.S. economic sanctions.<sup>36</sup>

But, this pursuit of oil diplomacy may support objectives beyond just energy supply. Beijing's bilateral arrangements with oil-rich Middle Eastern states also helped create diplomatic and strategic alliances with countries that were hostile to the United States. For example, with U.S. interests precluded from entering Iran, China may hope to achieve a long-term competitive advantage relative to the United States. Over time, Beijing's relationship-building may counter U.S. power and enhance Beijing's ability to influence political and military outcomes. One of Beijing's stated goals is to reduce what it considers U.S. superpower dominance in favor of a multipolar global power structure in which China attains superpower status on par with the United States. See Chapter 6 for further analysis of China's energy needs and strategies.

### **China and North Korea**

In October 2002, North Korea revealed that it secretly had resumed its nuclear weapons program. This was in violation of its commitments under the 1994 Agreed Framework, as well as the NPT, its IAEA safeguards agreement, and the Joint North-South Declaration on the Denuclearization of the Korean Peninsula. The North Korean government acknowledged to a U.S. delegation that it had a program to enrich uranium for nuclear weapons, which the North now denies, triggering the current crisis on the Korean Peninsula. In the late 1990s, the United States had evidence of the uranium enrichment program,<sup>37</sup> which now has been corroborated by Pakistan's A.Q. Khan, who began working with North Korea on uranium enrichment not long after the 1994 Agreed Framework was signed.

It is reported that around 1997, Pakistan's A.Q. Khan "made inroads with the government of Kim Jong Il, as it sought a way to make nuclear fuel away from the Yongbyon plant and the prying eyes of American satellites."<sup>38</sup> According to intelligence officials cited in the *New York Times*, Pakistan transferred to North Korea all of the equipment and technology it needed to produce uranium based nuclear weapons.<sup>39</sup>

In addition, CIA Director George J. Tenet stated that "[T]he Intelligence Community judged in the mid-1990's that North Korea had produced one, possibly two, nuclear weapons. The eight thousand rods the North claims to have processed into plutonium metal

would provide enough plutonium for several more.”<sup>40</sup> Recent reports now indicate that North Korea may have reprocessed all eight thousand fuel rods and that it may have sufficient stocks for an additional eight or nine nuclear weapons.<sup>41</sup>

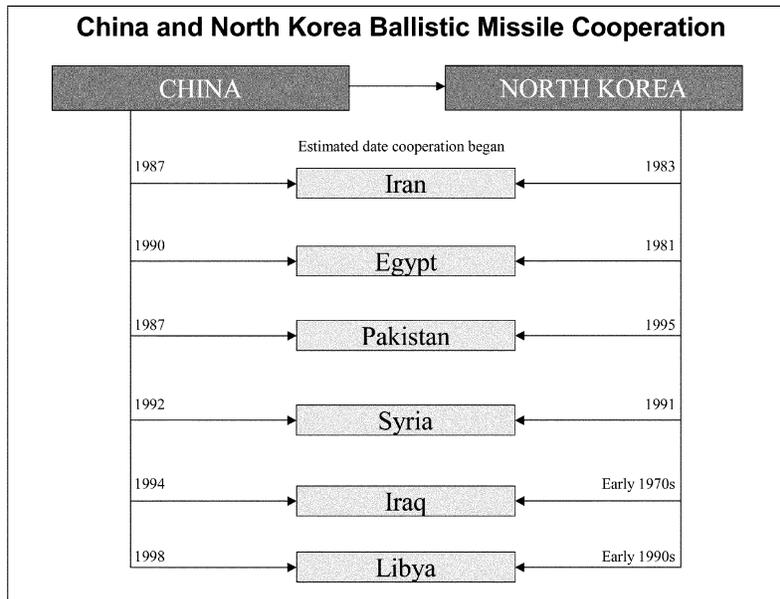
In June 2000, the Japanese newspaper *Sankei Shimbun* obtained a Chinese report on the North’s uranium production program, which it said was secretly operating since 1989 at the Mt. Chonma Power Plant in North Phyongan Province. The information was provided by a North Korean military defector.<sup>42</sup>

Open to question is when Beijing learned of North Korea’s nuclear weapons programs and how much it has known, given China’s close cooperation with Pakistan’s nuclear program and Pakistan’s cooperation with North Korea. China has provided assistance to North Korea’s missile program, its space program, and possibly its nuclear program, either directly or indirectly through Pakistan.<sup>43</sup> Since the 1990s, Chinese airspace, military airfields, and ports were used to transport WMD and related technologies between Pakistan, North Korea, and Iran.<sup>44</sup> According to the CIA, “[f]irms in China have provided dual-use missile-related items, raw materials, and/or assistance to . . . North Korea.”<sup>45</sup>

Similarities also exist between Chinese and North Korean missiles. “China’s CSS-3 booster stage rocket and the DPRK’s [North Korea] Taepo Dong-1 (fired over Japan on 31 August 1998) used liquid hydrogen-nitrogen mixed fuel.”<sup>46</sup> As reported in the spring 2001 issue of the *Journal of International Affairs*, the CIA also noted that following the U.S. bombing of the Chinese embassy in Belgrade, Chinese state-owned enterprises increased exports of high-technology components to North Korea.<sup>47</sup> According to the *Washington Times*, U.S. intelligence believes a Chinese chemical manufacturer in Dalian, which is a Chinese seaport near North Korea, shipped “tons” of tributyl phosphate (TBP), a dual-use chemical, to North Korea. U.S. intelligence believes the TBP was intended for the North’s nuclear weapons program.<sup>48</sup>

Several North Korean government-trading firms are located in China. For example, the Korea Daesong Bank operates a branch called the Korea Daesong Trading Corporation which is located in Hong Kong.<sup>49</sup> The Zokwang trading company in Macau is part of the Korea Daesong Trading Corporation and handles exports of industrial products. U.S. intelligence has linked this company to North Korea’s covert WMD program.<sup>50</sup> Moreover, in Shanghai are the Maebong Trading Co. and the Amur River National Development General Bureau.<sup>51</sup> In 1997, a former official of North Korea’s Ministry of Foreign Affairs testified before Congress stating that the Maebong Trading Company was responsible for importing high-technology weapons such as missiles.<sup>52</sup>

Chinese and North Korean assistance to global ballistic missile proliferation is extensive. With respect to ballistic missiles, China and North Korea have been providers of ballistic missiles, cruise missiles, and their production facilities to Iran, Iraq, Syria, and Egypt. In fact, very few programs have not directly benefited from Chinese and/or North Korea assistance and, with the exception of Libya and Iraq, cooperation continues today. These interrelationships are highlighted below.



Source: See Appendix D for background information.

### ***China's Role in the North Korea Crisis***

From the onset of the current crisis, the United States has been seeking China's assistance in resolving the stand-off with North Korea. China exerts significant leverage over North Korea and is its largest trading partner. Moreover, a Treaty of Friendship, Cooperation and Mutual Assistance between China and North Korea dates back to 1961. Without Chinese assistance, it is difficult to imagine how the regime in the North could remain in power. China provides approximately ninety percent of North Korea's oil and forty percent of its food<sup>53</sup> (approximately \$500 million in food and heavy oil)<sup>54</sup> and has consistently allocated twenty-five to thirty-three percent of its foreign assistance budget to North Korea since 1996.<sup>55</sup> It was reported that the oil pipeline between China and North Korea experienced "technical difficulties" and was shut down for three days in February 2003<sup>56</sup>—an event analysts say sent a powerful signal to Pyongyang and helped to persuade North Korea to join three-country talks in April 2003.<sup>57</sup> One estimate holds that the North Korean economy would be paralyzed within a period of six months should Chinese energy assistance be halted.<sup>58</sup> Another study estimates that Leader Kim Jong Il's regime would collapse within two years if international economic sanctions were imposed.<sup>59</sup>

Nonetheless, despite China's active role in the Six Party Talks, in which it is serving as the key intermediary with North Korea, to date it appears unwilling to use its leverage in a significant way. Notably, China has been opposed to sanctions and to discussing the North Korean nuclear issue in the United Nations.<sup>60</sup> If North Korea were to carry out nuclear tests publicly, China reportedly has indicated that it would not oppose a proposal to impose economic sanctions in the United Nations.<sup>61</sup> But thus far, China has

resisted attempts to put this issue before the United Nations, presumably in support of promises it made to Pyongyang.<sup>62</sup>

China's position in the "Six Party Talks is that it seeks elimination of North Korea's nuclear weapons program and that it agrees with the U.S. position that a complete, verifiable and irreversible dismantling of the North's nuclear capabilities is required. North Korea has indicated that it will dismantle its nuclear weapons program in return for economic aid and security guarantees. But, subsequent to the last round of Six Party talks in February 2004, Pyongyang's official news agency stated that allowing nuclear inspections and the dismantling of its nuclear weapons program would only lead to a U.S. invasion,"<sup>63</sup> not prevent it.

Beijing's desire to avoid regional instability and regime change in Pyongyang, its long-time ally and buffer state, may be inducing its active participation in the Six Party Talks. Regime change in North Korea, either through economic blockade or a military strike, could result in a democratic and reunified Korea, likely increasing American influence in Asia. On the other hand, Beijing's active role in facilitating talks fosters good relations with the United States, its most important trading partner, and enhances China's prestige. Further, China's participation may help to assuage the security fears of its neighbors, prevent a regional arms buildup, and preclude the United States from taking preemptive military action against the North or forcing imposition of an economic blockade.

But time is not on our side in confronting this crisis. As the Six Party Talks drag on, North Korea's nuclear weapons and ballistic missile programs keep moving apace. While we cannot be sure just how far North Korea has progressed, there seems to be a growing consensus that it already possesses significant capabilities in this regard and will advance considerably further within a matter of months. As these capabilities are attained, the prospects for achieving a complete, verifiable, and irreversible dismantlement by North Korea are dimming substantially. Such an outcome, while contrary to U.S. objectives, may on the other hand satisfy Beijing's strategic objectives—its desire to keep the North Korean regime in place while also being perceived to have worked cooperatively with the international community.

The key question is not only whether China will be willing to exert leverage in a meaningful way on North Korea, but also whether China is prepared to press the North Koreans to accept a robust and intrusive dismantlement verification regime, an essential component of a complete, verifiable, and irreversible dismantlement scenario. North Korea's failure to comply with the 1994 Agreed Framework underscores the absolute requirement for onsite inspections and verification. Given China's posture to date on the Proliferation Security Initiative (PSI), not to mention its own continuing proliferation problems, it is certainly a questionable proposition.

The Commission is concerned that the United States, with little benefit in return, may be offering unrelated trade concessions or other inducements to China for its cooperation in this crisis. The Commission believes that it is as much in China's national interests as it is in the U.S. national interest to achieve a nuclear-free Korean Peninsula and therefore that unrelated inducements for China's help should not be necessary.

The recent visit of Leader Kim Jong Il to meet with China's leaders, including President Hu and Central Military Commission Chairman Jiang Zemin, followed a visit by Vice President Cheney, during which Mr. Cheney presented Beijing with new evidence on North Korea's nuclear weapons program and reportedly warned that time is running out for ending the stalemate. President Hu is said to have advised Kim to soften his stance on North Korea's nuclear weapons program, after reassuring Kim that chances were slim that the United States would invade North Korea. Kim is also believed to have requested more aid.<sup>64</sup> On the heels of Kim's return to Pyongyang, North Korea's number two leader Kim Yong-nam told a U.S. policy expert visiting the North that "If Bush insists on his present policy of a complete, irreversible and verifiable dismantling first, we wouldn't be interested in having a deal with the United States. . . . We are going to use this time one hundred percent effectively to strengthen our nuclear deterrent, both quantitatively and qualitatively."<sup>65</sup>

### **Export Controls**

In November 2000, the Chinese government pledged to the United States that it would not assist "in any way, any country in the development of ballistic missiles that can be used to deliver nuclear weapons" and that it would publish comprehensive, missile-related export controls. In return, the United States agreed to waive sanctions for Chinese assistance to Iranian and Pakistani missile programs. In August 2002, as part of this commitment, the Chinese government published a comprehensive export control list.<sup>66</sup>

It remains to be seen how China will progress in implementing its new regulations. According to a recent in-country assessment by the Monterey Institute of International Studies, the Chinese government has taken steps to strengthen its "export control infrastructure, increase communication among various branches and levels of government, offer training to local officials and exporters and improve the transparency of its system."<sup>67</sup> Problems, however, remain with respect to end-use verifications, the number of personnel dedicated to training, the ability of companies to skirt the law through falsified documentation, and a lack of information on the part of some exporters.<sup>68</sup> The Commission believes that the Chinese government has not made an adequate effort to monitor its companies, as evidenced by the cases of serial proliferators that are government entities or spin-offs of formerly state-owned enterprises.

The Monterey study points to the lack of public evidence that firms have been punished for illegal exports, in contrast to Chinese government claims that in fact violators have been punished discretely with fines, revocation of licenses, and other legal punishments.<sup>69</sup>

During April 2004 talks, the U.S.-China Joint Commission on Commerce and Trade, a government-to-government consultative forum, reached agreement on procedures to strengthen end-use visit cooperation and help ensure that U.S. exports of controlled dual-use items are being used by their intended recipients for their intended purposes.

How China implements its export control regime will be a key test of its commitment to cooperate with the United States to stem

proliferation. Implementation will depend on the Chinese government's foreign policy objectives which may override any interest in pursuing nonproliferation objectives: China's "strategic relationship with Pakistan, its desire to avoid instability or regime change in North Korea, or its desire to demonstrate its opposition to a unipolar world."<sup>70</sup>

### **The Proliferation Security Initiative**

In May 2003, the United States launched the Proliferation Security Initiative to combat further spread of WMD. So far, the United Kingdom, Japan, Australia, Italy, France, Germany, Poland, Portugal, the Netherlands, Spain, and Liberia have agreed to support the initiative. Canada, Singapore, and Norway are also expected to provide support. The PSI is aimed at air, sea, and land interdiction of WMD and their delivery systems and related materials to state and nonstate actors of proliferation concern.

Although it is not a member of the PSI, China has been informed about the progress of the talks and has been invited to participate but has not agreed to do so. The chances of China agreeing to aggressive measures against the North Korean arms trade along the lines of the PSI appear unlikely. The Chinese foreign ministry on July 11, 2003, stated that China "does not approve of sanctions, blockages and other measures which are aimed at putting pressure on (North Korea). . . . Doing so will not only be useless to solve the problem, but will escalate antagonism and tension."<sup>71</sup> Further, China appears to be working through the United Nations to not only undermine the initiative but also to render it globally ineffective. This has been accomplished by getting the United States to drop a provision on the interdiction of foreign vessels carrying banned weapons on the high seas.<sup>72</sup>

Whether through a deterrent effect, or actual interdictions of WMD and missiles or their components, the PSI could put a serious dent in the North's ability to earn income from illicit exports to rogue states. In 2001, Pyongyang reportedly earned more than \$560 million from missiles sales, and income from illegal drugs was between \$500 million and \$1 billion.<sup>73</sup> The North has stated that an economic embargo would be grounds for war. PSI interdictions, as contemplated, appear designed to fall short of enforcing an indiscriminate embargo on outbound North Korean maritime traffic, with the focus instead on WMD shipments. Whether such interdictions would be considered a less provocative measure than an embargo remains to be seen. President Bush has proposed that the PSI be expanded to include greater cooperation in law enforcement, such as through Interpol, "to bring to justice those who traffic in deadly weapons, to shut down their labs, to seize their materials, to freeze their assets."<sup>74</sup>

The Bush administration believes the PSI was an important factor in convincing Libya to end its nuclear program after American and British intelligence led to the interception of a German-owned ship bound for Libya with parts of sophisticated centrifuges. The administration hopes that North Korea will follow Libya's example and find that it would be to its own benefit to renounce its nuclear ambitions.

**RECOMMENDATIONS**

- Should the current stalemate in the Six Party Talks continue, the Commission recommends that Congress press the administration to work with its regional partners, intensify its diplomacy, and ascertain North Korean and Chinese intentions with a detailed and staged proposal beginning with a freeze of all North Korea's nuclear weapons programs, followed by a verifiable and irreversible dismantlement of those programs. Further work in this respect needs to be done to determine whether a true consensus on goals and process can be achieved with China. If this fails, the United States must confer with its regional partners to develop new options to resolve expeditiously the standoff with North Korea, particularly in light of public assessments that the likely North Korean uranium enrichment program might reach a stage of producing weapons by 2007.
- The Commission recommends that Congress press the administration to renew efforts to secure China's agreement to curtail North Korea's commercial export of ballistic missiles and to encourage China to provide alternative economic incentives for the North Koreans to substitute for the foreign exchange that would be forgone as a result of that curtailment.
- As recommended in the Commission's 2002 Report, and now similarly proposed by President Bush and the U.N. Secretary General, the Commission reiterates that Congress should support U.S. efforts to work with the U.N. Security Council to create a new U.N. framework for monitoring the proliferation of weapons of mass destruction and their delivery systems in conformance with member nations' obligations under the Nuclear Non-Proliferation Treaty, the Biological Weapons Convention, and the Chemical Weapons Convention. This new monitoring body would be delegated authority to apply sanctions to countries violating these treaties in a timely manner or, alternatively, would be required to report all violations in a timely manner to the Security Council for discussion and sanctions.<sup>75</sup>
- As recommended in the Commission's 2002 Report, the Commission reiterates that Congress should act to broaden and harmonize proliferation sanctions by amending all current statutes that pertain to proliferation to include a new section authorizing the president to invoke economic sanctions against foreign nations that proliferate WMD and technologies associated with WMD and their delivery systems. These economic sanctions would include import and export limitations, restrictions on access to U.S. capital markets, restrictions on foreign direct investment into an offending country, restrictions on transfers by the U.S. government of economic resources, and restrictions on science and technology cooperation or transfers. The new authority should require the president to report to Congress the rationale and proposed duration of the sanctions within seventy-two hours of imposing them. Although the president now has the authority to select from the full range of economic and security-related sanctions, these sanctions are case specific and relate to designated activities within a narrow set of options available on a case-by-case basis.<sup>76</sup>

### Appendix A Current U.S. Sanctions on the PRC

ACT	SANCTIONED PARTY(IES)	SANCTION	REASON FOR SANCTION	DATE OF SANCTION	DATE SANCTION WAIVED
Foreign Relations Authorization Act of 1990-91 (Tiananmen Sanctions)		<ul style="list-style-type: none"> <li>• Suspension of: 1) Export of Satellites for Launch by the People's Republic of China</li> </ul>	<ul style="list-style-type: none"> <li>• Tiananmen Square crackdown</li> </ul>	<ul style="list-style-type: none"> <li>• 1990</li> </ul>	1) Presidential waivers for the export of satellites for launch by the PRC occurred in the following cases: —Aussat-1 and -2 and Frijia, 1991 —Asiasat-2, Apsat, Intelsat-7A, Starsat, and AfriStar, 1992 —Iridium and Intelsat-8, 1993 —Echostar, 1994 —Cosat, Mabuhay and Chinasat-7, 1996 —Asia Pacific Mobile Telecommunications (APMT) satellite, 1996 —Globalstar, 1996 —Satellite parts for PRC Fengyun-1, 1996 —Sinosat, 1996 —Chinasat-8 (built by Loral), 1998 2) 1998 (Presidential waiver)
1990 Missile Technology Control Act	<ul style="list-style-type: none"> <li>• China Precision Machinery Import-Export Corp. and China Great Wall Industry Corp.</li> <li>• China's Ministry of Aerospace Industry</li> </ul>	<ul style="list-style-type: none"> <li>• Prohibition of the export of missile-related computer technology and satellites</li> <li>• Prohibition of the export of Missile Technology Control Regime (MTCR) items and U.S. government contracts</li> </ul>	<ul style="list-style-type: none"> <li>• PRC transferred missile-related technology to Pakistan</li> <li>• PRC shipped M-11 related equipment to Pakistan</li> </ul>	<ul style="list-style-type: none"> <li>• 1991</li> <li>• 1993</li> </ul>	<ul style="list-style-type: none"> <li>• 1992 (Presidential waiver)</li> <li>• 1994 (Presidential waiver)</li> </ul>

Iran Nonproliferation Act of 2000	<ul style="list-style-type: none"> <li>China Metallurgical Equipment Corporation</li> <li>Liyang Chemical Equipment, China Machinery and Electric Equipment Import and Export Company (aka China National Machinery and Electric Equipment Import and Export Company), and a Chinese individual</li> <li>Jiangsu Yongli Chemicals and Technology Import and Export Corporation</li> <li>Liyang Chemical Equipment Company (aka Liyang Yunlong), Zibo Chemical Equipment Plant (aka Chemet Global Ltd.), China National Machinery and Electric Equipment Import and Export Company, Wha Cheong Tai Company, China Shipbuilding Trading Company, China Precision Machinery Import/Export Corporation, China National Aero-Technology Import and Export Corporation, and one Chinese individual</li> </ul>	<ul style="list-style-type: none"> <li>Prohibition of U.S. exports of MTCR annex items to the sanctioned entity</li> <li>Prohibition of U.S. government procurement of goods and services from the sanctioned entities. Prohibition of U.S. government assistance to the entities. No new individual licenses shall be granted for the transfer to these foreign entities of controlled items.</li> <li>Prohibition of U.S. government procurement of goods and services from the sanctioned entity. Prohibition of U.S. government assistance to the entities. No new individual licenses shall be granted for the transfer to these foreign entities of controlled items.</li> <li>Prohibition of U.S. government procurement of goods and services from the sanctioned entity. Prohibition of U.S. government assistance to the entities. No new individual licenses shall be granted for the transfer to these foreign entities of controlled items.</li> </ul>	<ul style="list-style-type: none"> <li>Proliferation of missile technology to Pakistan</li> <li>Supplying Iran with materials used in the manufacture of chemical and biological weapons</li> <li>Reports indicate company was involved in export of dual-use items covered in the Australia Group</li> <li>Aiding Iran's weapons of mass destruction programs</li> </ul>	<ul style="list-style-type: none"> <li>2001 (Duration of a minimum of 2 years)</li> <li>January 2002 (Duration of a minimum of 2 years)</li> <li>2001 (Duration of a minimum of 2 years)</li> <li>May 2002 (Duration of a minimum of 2 years)</li> </ul>
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**Appendix A Current U.S. Sanctions on the PRC—Continued**

ACT	SANCTIONED PARTY(IES)	SANCTION	REASON FOR SANCTION	DATE OF SANCTION	DATE SANCTION WAIVED
	<ul style="list-style-type: none"> <li>Taian Foreign Trade General Corporation, Zibo Chemical Equipment Plant, Liyang Yunlong Chemical Equipment Group Company, NORINCO, CPMIEC</li> <li>Beijing Institute of Opto-Electronic Technology (BIOET), NORINCO, CPMIEC, Oriental Scientific Instruments Corporation (OSIC), Zibo Chemical Equipment</li> </ul>	<ul style="list-style-type: none"> <li>Prohibition of U.S. government procurement of goods and services from the sanctioned entity. Prohibition of U.S. government assistance to the entities. No new individual licenses shall be granted for the transfer to these foreign entities of controlled items.</li> <li>Prohibition of U.S. government procurement of goods and services from the sanctioned entity. Prohibition of U.S. government assistance to the entities. No new individual licenses shall be granted for the transfer to these foreign entities of controlled items.</li> </ul>	<ul style="list-style-type: none"> <li>Missile proliferation</li> <li>Sold equipment or expertise that Iran could use in nuclear, chemical, and biological weapons programs</li> </ul>	<ul style="list-style-type: none"> <li>June 2003 (2 years)</li> <li>April 2004 (2 years)</li> </ul>	
Chemical and Biological Weapons Control and Warfare Act of 1991	<ul style="list-style-type: none"> <li>Nanjing Chemical Industries Group (PRC), Jiangsu Yongli Chemical Engineering and Technology Import/Export Co. (aka Jiangsu Yongli Chemicals and Technology Import and Export Corporation) (PRC), Cheong Yee Limited (Hong Kong), and five Chinese individuals</li> </ul>	<ul style="list-style-type: none"> <li>Prohibition of U.S. government procurement of goods or services from the sanctioned entities or persons. Prohibition of importation into the United States of products produced by the sanctioned entities.</li> </ul>	<ul style="list-style-type: none"> <li>Contributed to Iran's chemical weapons program</li> </ul>	<ul style="list-style-type: none"> <li>1997</li> </ul>	<ul style="list-style-type: none"> <li>In effect</li> </ul>

Iran-Iraq Arms Proliferation Act	<ul style="list-style-type: none"> <li>Jiangsu Yongli Chemicals and Technology Import Export Cop., Q.C. Chen, China Machinery and Equipment Import Export Corp., China National Machinery and Equipment Import Export Corp., CMEC Machinery and Equipment Import Export Co., CMEC Machinery Electrical Import Export Co., China Machinery and Electric Equipment Import Export Co., Wha Cheong Tai Co.</li> <li>China Shipbuilding Co.</li> </ul>	<ul style="list-style-type: none"> <li>Prohibition of U.S. government procurement of goods and services from the sanctioned entity. No new individual licenses shall be granted for the transfer to these foreign entities of controlled items.</li> <li>Prohibition of U.S. government procurement of goods and services from the sanctioned entity. No new individual licenses shall be granted for the transfer to these foreign entities of controlled items.</li> </ul>	<ul style="list-style-type: none"> <li>Chemical weapons technology to Iran</li> <li>Transfer of cruise missile technology to Iran</li> </ul>	<ul style="list-style-type: none"> <li>July 2002 (2 years)</li> <li>July 2002</li> </ul>	
Executive Order (12938)	<ul style="list-style-type: none"> <li>North China Industries Corporation (NORINCO)</li> </ul>	<ul style="list-style-type: none"> <li>Prohibition of the importation into the United States of any goods, technology, or services produced or provided by this entity. Prohibition of U.S. government procurement of goods and services from the sanctioned entity. Prohibition of U.S. government assistance to the entities. No new licenses shall be granted for the transfer to these foreign entities of controlled items.</li> </ul>	<ul style="list-style-type: none"> <li>Missile technology to Iran</li> </ul>	<ul style="list-style-type: none"> <li>May 2003 (2 years)</li> </ul>	<ul style="list-style-type: none"> <li>In effect</li> </ul>

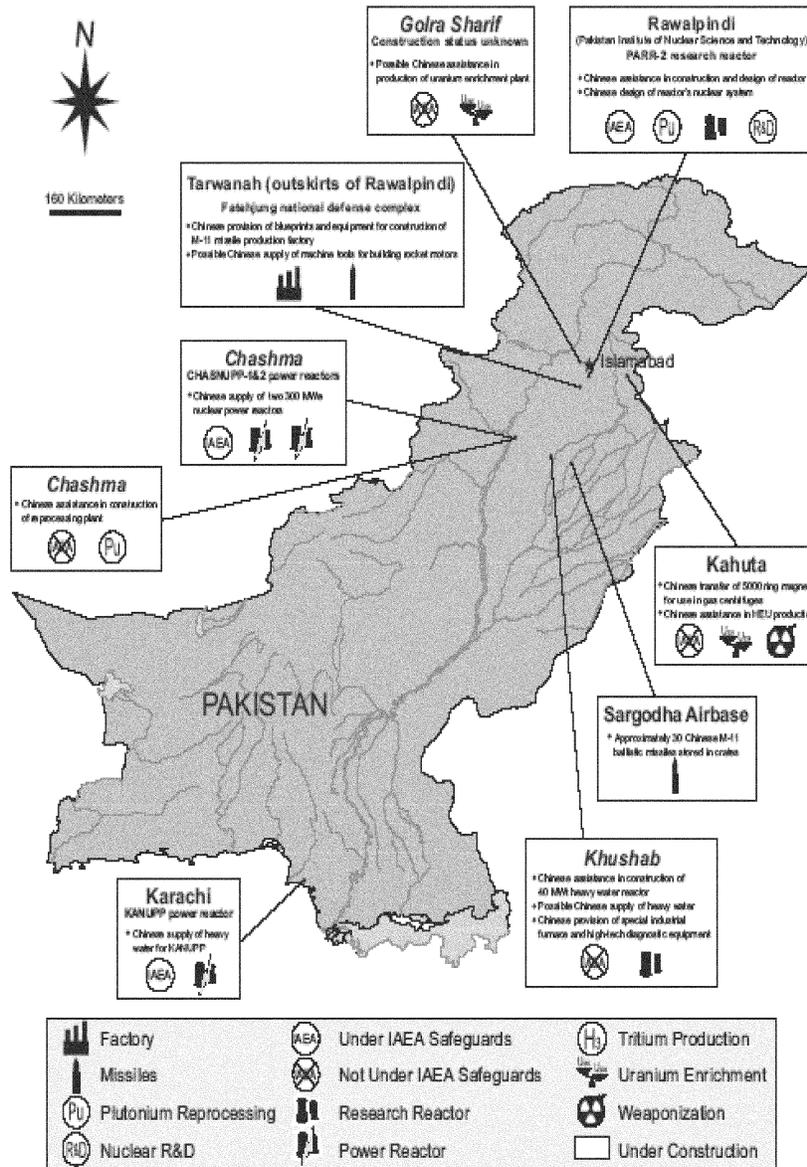
**Appendix A Current U.S. Sanctions on the PRC—Continued**

ACT	SANCTIONED PARTY(IES)	SANCTION	REASON FOR SANCTION	DATE OF SANCTION	DATE SANCTION WAIVED
Executive Order (12938)	<ul style="list-style-type: none"> <li>• CPMIEC</li> </ul>	<ul style="list-style-type: none"> <li>• Prohibition of the importation into the United States of any goods, technology, or services produced or provided by this entity. Prohibition of U.S. government procurement of goods and services from the sanctioned entity. Prohibition of U.S. government assistance to the entities. No new licenses shall be granted for the transfer to these foreign entities of controlled items.</li> </ul>	<ul style="list-style-type: none"> <li>• Missile technology to publicly unnamed country</li> </ul>	<ul style="list-style-type: none"> <li>• July 2003</li> </ul>	<ul style="list-style-type: none"> <li>• In effect</li> </ul>
Arms Export Control Act	<ul style="list-style-type: none"> <li>• NORINCO</li> </ul>	<ul style="list-style-type: none"> <li>• Prohibition of the importation of products produced by the entity. Prohibition of U.S. government procurement of goods and services from the sanctioned entity. Prohibition of U.S. government assistance to the entities. No new individual licenses shall be granted for the transfer to these foreign entities of controlled items.</li> </ul>	<ul style="list-style-type: none"> <li>• Engaged in missile technology proliferation activities</li> </ul>	<ul style="list-style-type: none"> <li>• September 2003 (2 years)</li> </ul>	<ul style="list-style-type: none"> <li>• Waiver for 1 year on import ban for non-NORINCO products</li> </ul>

Sources: *Federal Register* and Shirley Kan, Congressional Research Service (CRS) Report: RL31555, "China's Proliferation of Weapons of Mass Destruction."

**Appendix B Chinese Assistance to Pakistani Nuclear and Missile Facilities**

**CHINESE ASSISTANCE TO PAKISTANI NUCLEAR AND MISSILE FACILITIES**



Source: East Asia Nonproliferation Project, Center for Nonproliferation Studies, Monterey Institute of International Studies

**Appendix C China's Nuclear Technology Exports: 1980–2004**

COUNTRY	TYPE OF ASSISTANCE
<b>ALGERIA</b>	<p><b>Research Reactor</b></p> <ul style="list-style-type: none"> <li>• 15 MWt pressurized heavy water research reactor; possible provisions of heavy water for the reactor; construction began around 1988; placed under IAEA safeguards in 1992</li> <li>• Designs for construction of third stage of Algeria's Center for Nuclear Energy Research</li> </ul>
<b>ARGENTINA</b>	<p><b>Low Enriched Uranium</b></p> <ul style="list-style-type: none"> <li>• 20 percent enriched, sold in 1980s, no safeguards</li> </ul> <p><b>Heavy Water</b></p> <ul style="list-style-type: none"> <li>• 50–60 metric tons (1981–1985); no safeguards</li> </ul> <p><b>Uranium Concentrate (U3O8)</b></p> <ul style="list-style-type: none"> <li>• 1981–1985, no safeguards</li> </ul> <p><b>Uranium Hexafluoride Gas (UF6)</b></p> <ul style="list-style-type: none"> <li>• Early 1980s, 30 metric tons; no safeguards</li> </ul> <p><b>Highly Enriched Uranium</b></p> <ul style="list-style-type: none"> <li>• 12 kg, no safeguards, (1981–1985)</li> </ul>
<b>BRAZIL</b>	<p><b>Enriched Uranium</b></p> <ul style="list-style-type: none"> <li>• 3 percent, 7 percent, 20 percent enriched; 200 kg total</li> <li>• 1984, no safeguards</li> </ul>
<b>CHILE</b>	<p><b>Enriched Uranium</b></p> <ul style="list-style-type: none"> <li>• 3, 7, 20 percent enriched, no safeguards (1984)</li> <li>• Uranium mining and processing</li> </ul>
<b>INDIA</b>	<p><b>Heavy water</b></p> <ul style="list-style-type: none"> <li>• 1982–1987; 130–150 metric tons</li> <li>• No IAEA safeguards</li> </ul> <p><b>Low-Enriched Uranium</b></p> <ul style="list-style-type: none"> <li>• 1995, for India's Tarapur reactors</li> <li>• Supplied under IAEA safeguards</li> </ul>
<b>IRAN</b>	<p><b>Research Reactors</b></p> <ul style="list-style-type: none"> <li>• 27kW subcritical, neutron source reactor; provided in 1985; currently under IAEA safeguards</li> <li>• Zero-power reactor; commercial contract signed in 1991; currently under IAEA safeguards</li> <li>• HT-6B Tokamak nuclear fusion reactor, located at Azan University</li> <li>• 20 MWt reactor; contract signed in 1992 but the deal was canceled due to U.S. pressure</li> </ul> <p><b>Power Reactors: two 300 MWe reactors</b></p> <ul style="list-style-type: none"> <li>• Deal suspended in 1995 and canceled in 1997</li> <li>• CIA verified project cancellation</li> </ul> <p><b>Calutrons (electromagnetic isotope separators, EMIS)</b></p> <ul style="list-style-type: none"> <li>• For Karaj and Isfahan facilities; commercial contract signed in 1989; under safeguards</li> </ul> <p><b>Uranium Hexafluoride (UF6) Production Facility</b></p> <ul style="list-style-type: none"> <li>• Project canceled in October 1997</li> <li>• CIA verified cancellation of deal</li> <li>• China possibly provided blueprints for facility</li> </ul> <p><b>Zirconium Tube Production Facility</b></p> <ul style="list-style-type: none"> <li>• Assistance continuing</li> </ul> <p><b>Uranium Mining Assistance</b></p> <p><b>Tributylphosphate (for reprocessing)</b></p>
<b>IRAQ</b>	<p><b>Ring Magnets</b></p> <ul style="list-style-type: none"> <li>• Exports of samarium-cobalt magnets for gas centrifuges, 1989–1990</li> </ul> <p><b>Lithium hydride</b></p> <ul style="list-style-type: none"> <li>• 7 tons exported by the China Wanbao Engineering Company for \$15 million</li> </ul> <p><b>Weapons Grade Uranium</b></p> <ul style="list-style-type: none"> <li>• 1980</li> </ul>
<b>LIBYA</b>	<p><b>Nuclear Weapons Designs</b></p> <ul style="list-style-type: none"> <li>• In 2004, Chinese nuclear weapons designs were reportedly discovered at Libyan facilities, probably the result of Pakistani proliferation</li> </ul>
<b>JAPAN</b>	<p><b>Uranium Concentrate</b></p> <ul style="list-style-type: none"> <li>• 250 Short Tons to Tokyo Electric Power (1992)</li> </ul>

### Appendix C—Continued China's Nuclear Technology Exports: 1980–2004

COUNTRY	TYPE OF ASSISTANCE
<b>PAKISTAN</b>	<p><b>NUCLEAR WEAPON-RELATED ASSISTANCE</b></p> <p><b>Nuclear Weapon Design</b></p> <ul style="list-style-type: none"> <li>• Basic, Hiroshima-sized weapon</li> </ul> <p><b>Nuclear Weapon Testing</b></p> <ul style="list-style-type: none"> <li>• Possible inclusion of Pakistani observers at China's Lop Nur test facility (1989)</li> </ul> <p><b>Possible Provision of Tritium Gas</b></p> <ul style="list-style-type: none"> <li>• 1986, no safeguards</li> </ul> <p><b>Uranium Enrichment</b></p> <ul style="list-style-type: none"> <li>• Assistance to unsafeguarded Kahuta enrichment facility</li> <li>• This assistance was mutually beneficial</li> </ul> <p><b>Ring Magnets</b></p> <ul style="list-style-type: none"> <li>• About 5,000 to unsafeguarded A.Q. Khan Research Laboratory in Kahuta (1995)</li> </ul> <p><b>Weapons-Grade Uranium for Two Devices</b></p> <ul style="list-style-type: none"> <li>• Early 1980s, supplied without safeguards</li> </ul> <p><b>Plutonium Production Reactor at Khushab</b></p> <ul style="list-style-type: none"> <li>• 50–70 MW heavy water reactor (unsafeguarded)</li> <li>• Construction assistance</li> <li>• Provided special industrial furnace and high-tech diagnostic equipment (1994–1995)</li> </ul> <p><b>Reprocessing Facility at Chashma</b></p> <ul style="list-style-type: none"> <li>• Possible assistance constructing unsafeguarded facility</li> </ul> <p><b>CIVILIAN NUCLEAR ASSISTANCE</b></p> <p><b>Power Reactor: Chashma-1 (CHASNUPP), 300 MWe</b></p> <ul style="list-style-type: none"> <li>• Build by CNNC, deal signed in late 1995</li> <li>• Began operating in November 1999</li> <li>• Under IAEA safeguards (INFCIRC/418)</li> </ul> <p><b>Research Reactors</b></p> <ul style="list-style-type: none"> <li>• Miniature Neutron Source Reactor (MNSR); supplied under IAEA safeguards (INFCIRC/393) in 1991</li> <li>• Helped construct PARR-2 research reactor, safeguarded</li> </ul> <p><b>Heavy water (D2O)</b></p> <ul style="list-style-type: none"> <li>• Up to 5 MT/year for safeguarded PHWR [Kanupp] research reactor</li> <li>• Possibly diverted by Pakistan to the Khushab research reactor against Chinese wishes</li> </ul> <p><b>Fuel Fabrication Services</b></p>
<b>NORTH KOREA</b>	<b>Provided Nuclear Expertise until 1987</b>
<b>SYRIA</b>	<p><b>Neutron Source Reactor</b></p> <ul style="list-style-type: none"> <li>• 30kwt miniature neutron source research reactor</li> </ul> <p><b>Highly Enriched Uranium</b></p> <ul style="list-style-type: none"> <li>• Supplied under IAEA safeguards (1992)</li> </ul>

Source: Monterey Institute of International Studies.

### China's Missile Technology Exports: 1980–Today

COUNTRY	TYPE OF ASSISTANCE
<b>ALBANIA</b>	<p><b>Cruise Missiles</b></p> <ul style="list-style-type: none"> <li>• HY-1, HY-2</li> </ul> <p><b>Surface-to-air missiles (SAMs)</b></p> <ul style="list-style-type: none"> <li>• HQ-2</li> </ul>
<b>ARGENTINA</b>	<ul style="list-style-type: none"> <li>• Missile Fuel (1995)</li> </ul>
<b>BANGLADESH</b>	<p><b>Cruise Missiles</b></p> <ul style="list-style-type: none"> <li>• HY-2</li> </ul>
<b>BRAZIL</b>	<p><b>Missile Technology</b></p> <ul style="list-style-type: none"> <li>• SS-300</li> </ul> <p><b>Space Launch</b></p> <ul style="list-style-type: none"> <li>• Joint Satellite Program</li> <li>• Launcher and satellite manufacturing technology</li> <li>• VLS-SLV space launch vehicle</li> </ul>

**Appendix C—Continued China's Missile Technology Exports: 1980–Today**

COUNTRY	TYPE OF ASSISTANCE
<i>EGYPT</i>	<b>Cruise Missiles</b> <ul style="list-style-type: none"> <li>• 72 HY-2 antiship missiles (1990s)</li> </ul>
<i>IRAN</i>	<b>Antimissile systems</b> <ul style="list-style-type: none"> <li>• Modified SA-10 and SA-12 SAMs</li> </ul> <b>Anti-tank missiles</b> <ul style="list-style-type: none"> <li>• HJ-73</li> </ul> <b>Ballistic Missiles</b> <ul style="list-style-type: none"> <li>• M-7/8610/CSS-8</li> <li>• M-9/DF-15 (China cancelled the sale under U.S. pressure)</li> </ul> <b>Cruise Missiles</b> <ul style="list-style-type: none"> <li>• HY-1</li> <li>• 100 HY-2 (Silkworm)</li> <li>• HY-4/C-201</li> <li>• C-601</li> <li>• YJ-1/C-801 (sales halted in October 1997)</li> <li>• YJ-2/C-802 (sales halted in October 1997)</li> </ul> <b>Assistance to Iran's Indigenous Missile Programs</b> <ul style="list-style-type: none"> <li>• Extensive production assistance for the 8610/CSS-8 missile</li> <li>• Extensive production infrastructure for HY-2, C-801 and C-802 missiles (production assistance halted in 1997)</li> <li>• Possible assistance to the Shahab-3 ballistic missile</li> <li>• FL-10 air-launched cruise missile</li> <li>• Assistance in converting SAMs to surface-to-surface missiles</li> <li>• Iran-130 ballistic missile</li> <li>• Tondar-68 (modified M-11) ballistic missile</li> <li>• Oghab/Ugab (Eagle) ballistic missile</li> </ul> <b>Missile Fuel</b> <ul style="list-style-type: none"> <li>• Various propellant ingredients</li> <li>• Ammonium perchlorate</li> </ul> <b>Missile Guidance and Control Technology</b> <ul style="list-style-type: none"> <li>• Guidance kits (mid-1990s)</li> <li>• Gyroscopes (mid-1990s)</li> <li>• Accelerometers (mid-1990s)</li> <li>• Test equipment for ballistic missiles (mid-1990s)</li> </ul> <b>Surface-to-air missiles (SAMs)</b> <ul style="list-style-type: none"> <li>• HQ-2J, HN-5, NN-5 (shoulder-fired)</li> </ul>
<i>IRAQ</i>	<b>Cruise Missiles (1980s–1990s)</b> <ul style="list-style-type: none"> <li>• HY-2 (Silkworm)</li> <li>• C-601</li> <li>• YJ-1/C-801</li> </ul> <b>Missile Engine Testing Facility/Project 3209</b> <ul style="list-style-type: none"> <li>• Supply of standard parts for liquid propellant engine, late 1980s</li> </ul> <b>Missile Fuel</b> <ul style="list-style-type: none"> <li>• 10 tons of UDMH, late 1980s</li> <li>• 7 tons of lithium hydride; 1989–1990; exported by the China Wanbao Engineering Company (CWEC)</li> <li>• Ammonium perchlorate, 1994</li> </ul>
<i>LIBYA</i>	<b>Missile Fuel</b> <ul style="list-style-type: none"> <li>• Lithium hydride</li> </ul>
<i>NORTH KOREA</i>	<b>Cruise Missiles</b> <ul style="list-style-type: none"> <li>• HY-1, HY-2</li> </ul> <b>Expertise/training</b> <ul style="list-style-type: none"> <li>• Scud reverse engineering</li> <li>• Long-range missile project</li> <li>• Rocket engine design</li> <li>• Metallurgy</li> <li>• Airframe expertise</li> <li>• Small warhead design</li> </ul> <b>Missile Technology</b> <ul style="list-style-type: none"> <li>• Rocket design and production</li> <li>• Fiber Optic Gyroscopes</li> <li>• Accelerometers</li> </ul> <b>Surface-to-air missiles (SAMs)</b> <ul style="list-style-type: none"> <li>• HQ-2</li> </ul>

**Appendix C—Continued China's Missile Technology Exports: 1980–Today**

COUNTRY	TYPE OF ASSISTANCE
<b>PAKISTAN</b>	<p><b>Ballistic Missiles and Launchers</b></p> <ul style="list-style-type: none"> <li>• 34 M–11/DF–11 missiles; stored at Pakistan's Sargodha Air Force Base near Lahore; delivered in November 1992</li> <li>• M–11 transporter-erector-launchers (TEs)</li> </ul> <p><b>Possible Assistance to Indigenous Missile Programs</b></p> <ul style="list-style-type: none"> <li>• Hatf–1, Hatf–2 and Hatf–3 ballistic missiles</li> <li>• Anza surface-to-air missiles</li> </ul> <p><b>Missile Fuel</b></p> <ul style="list-style-type: none"> <li>• Ammonium perchlorate, 10 tons seized in Hong Kong in 1996; Pakistan's SUPARCO was caught attempting to import the ammonium perchlorate from a company in Xian, China</li> </ul> <p><b>Missile Guidance</b></p> <ul style="list-style-type: none"> <li>• Gyroscopes</li> <li>• Accelerometers</li> <li>• On-board computers</li> </ul> <p><b>Assistance to Missile Production Factory</b></p> <ul style="list-style-type: none"> <li>• Rawalpindi, 40 km west of Islamabad</li> <li>• Likely producing Pakistani version of M–11 missile</li> <li>• Blueprints and construction equipment, possibly ongoing</li> </ul> <p><b>Cruise Missiles</b></p> <ul style="list-style-type: none"> <li>• HY–1, HY–2, FL–1, FL–2</li> </ul> <p><b>Missile technology</b></p> <ul style="list-style-type: none"> <li>• M–11 components (1991–1997)</li> </ul> <p><b>Surface-to-air missiles (SAMs)</b></p> <ul style="list-style-type: none"> <li>• HQ–2</li> </ul> <p><b>Anti-tank missiles</b></p> <ul style="list-style-type: none"> <li>• Alleged shipment of special metals and electronics for use in production (1998)</li> </ul>
<b>SAUDI ARABIA</b>	<p><b>Ballistic Missiles</b></p> <ul style="list-style-type: none"> <li>• 30+ DF–3 (CSS–2) missiles; deliveries began in 1988; and included construction of launch complex, training, and post-sale systems maintenance</li> <li>• In 1997, Saudi Arabia requested from China possible replacements for the aging DF–3 missiles; China did not provide any replacements</li> </ul>
<b>SYRIA</b>	<p><b>Ballistic Missiles</b></p> <ul style="list-style-type: none"> <li>• DF–15/M–9 missiles, Syria provided advance payments</li> <li>• Cancelled under U.S. pressure in 1991; Syria possibly received test missile</li> </ul> <p><b>Assistance with Indigenous Programs</b></p> <ul style="list-style-type: none"> <li>• 30 tons of ammonium perchlorate in 1992</li> <li>• Technical exchanges</li> </ul>
<b>THAILAND</b>	<p><b>Cruise Missiles</b></p> <ul style="list-style-type: none"> <li>• 50 YJ–1/C–801 missiles</li> </ul>
<b>TURKEY</b>	<ul style="list-style-type: none"> <li>• Short- and long-range missile technology (1995)</li> <li>• Joint production of WS–1 artillery rocket (1997–)</li> </ul>
<b>UNITED ARAB EMIRATES</b>	<p><b>Ballistic Missiles</b></p> <ul style="list-style-type: none"> <li>• Scud-B missile launchers</li> </ul> <p><b>Cruise Missiles</b></p> <ul style="list-style-type: none"> <li>• HY–2</li> </ul>

*Legend:*

MWt = megawatts thermal

MWe = megawatts electric

MT = metric tons

Kg = kilogram

Kw = kilowatt

KWt = kilowatt thermal

Source: Monterey Institute of International Studies, East Asian Nonproliferation/Center for Nonproliferation Studies (EANP/CNS), 2004.

#### **Appendix D Third World Ballistic Missile Cooperation Between or Among China and North Korea**

- **Iran.** In 1983, Iran signed a long-term financing agreement with North Korea for its Scud-B development program and offered its assistance in acquiring critical western technologies.<sup>77</sup> By 1987, North Korea sold Iran approximately 90 to 100 missiles and associated transporter erector launchers. By 1988, Iran had established a Scud-B production plant. In a follow-on to its Scud-B program, Iran negotiated for the purchase of the North Korean Nodong-1 intermediate-range ballistic missiles.<sup>78</sup> By 1989, Iran's domestically manufactured version of the Nodong the Shabab-3 missiles was undergoing flight-testing.<sup>79</sup> Between 1989 and 1990, Iran-China cooperation resulted in the purchase of approximately 150–200 M–7/8610 ballistic missiles and associated production technology.<sup>80</sup> By 1997, Iran was jointly developing with China the NP–110 short-range solid-fuel missile.<sup>81</sup> China has also assisted Iranian efforts to upgrade its North Korean Scud missile arsenal and North Korea has assisted Iranian efforts to improve the accuracy of the C–802, anti-ship cruise missiles Iran bought from China.<sup>82</sup>
- **Egypt.** Both China and North Korea have a long history of supporting Egypt's ballistic missile development efforts. Egypt-North Korea missile cooperation began in 1981,<sup>83</sup> and by the mid-1980s Egypt had provided North Korea an initial shipment of missiles. These were the stock from which North Korea established its domestic ballistic missile program. North Korea then assisted Egypt to produce an extended-range Scud-B.<sup>84</sup> Egypt has the additional goal of producing its own version of North Korea's SCUD-C.<sup>85</sup> This joint cooperation has been ongoing since. Documents seized in a raid on a North Korean front company in Bratislava, Slovakia in 2003, show that North Korea attempted to acquire missile technology for Egypt.<sup>86</sup> China's involvement with Egypt dates to June 1990, when it signed a protocol to help Egypt modernize its Sakr missile factory to produce a new version of the Scud-B.<sup>87</sup>
- **Pakistan.** Pakistan has both liquid-fuel and solid-fuel ballistic missile programs. It continues to receive extensive assistance from China for its solid-fuel ballistic missile and from North Korea for its liquid-fuel missiles. China-Pakistan cooperation began in the early 1990s, when China sold Pakistan M–11 SRBMs. This transfer also included production and manufacturing capability.<sup>88</sup> China has sold Pakistan more than thirty of the 180-mile range M–11 ballistic missiles and the means to build the 450-mile-range Shaheen-1 and 1200-mile-range Shaheen-II missiles.<sup>89</sup> In the late 1990s Pakistan reportedly purchased twelve to twenty-five North Korean Nodong missiles and by 1998 had conducted a Ghauri missile test flight. The Ghauri and the Nodong are probably the same missile.<sup>90</sup>
- **Syria.** Syrian-North Korean cooperation in ballistic missiles probably began in early 1989, when Syria sought North Korean assistance to establish a domestic missile production capability.<sup>91</sup> In 1991, Syria had purchased Scud-Cs from North Korea and by 2000 had upgraded its missile force with the purchase of the Nodong.<sup>92</sup> Chinese cooperation has been in the area of technology

vice the export of actual missiles. In 1999, Chinese-origin aluminum powder was delivered to Syria's missile program and it is not known if this was with Chinese complicity. China may have also assisted Syria with production technologies and materials and may have helped Syria to upgrade its North Korean missiles.

- **Libya.** In the early 1990s, North Korea assisted Libya in establishing its Scud production facility near Tripoli. This has been a long-term effort, and in 1999 missile components were interdicted at Gatwick Airport in England. This confirmed reports that North Korea has sold Scud and Nodong missiles to Libya.<sup>93</sup> Additionally, it has been reported that by June 1998, Chinese technicians were connected to the Al-Fatah missile program and that China continued to transfer missile technology at least until early 2000.<sup>94</sup>

#### ENDNOTES

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2. Pakistan has now tested the Shaheen II, a long-range, nuclear-capable, surface-to-surface ballistic missile with a range of up to 1,250 miles.

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6. See for example, CIA, *Unclassified Report To Congress On the Acquisition of Technology Relating to Weapons of Mass Destruction*; and U.S. Department of State, *Adherence To And Compliance With Arms Control*.

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8. "The Worldwide Threat 2004: Challenges in a Changing Global Context," testimony of George J. Tenet before the Senate Select Committee on Intelligence, February 24, 2004, [www.cia.gov/cia/public\\_affairs/speeches/2004/dci\\_speech\\_02142004.html](http://www.cia.gov/cia/public_affairs/speeches/2004/dci_speech_02142004.html) (February, 25 2004).

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16. CIA, *Unclassified Report To Congress On the Acquisition of Technology Relating to Weapons of Mass Destruction*, p. 8.

17. Ibid.
18. IAEA Information Circular, INFCIRC/539/Rev.2 (September 16, 2003), p. 4.
19. IAEA INFCIRC/405 (May 1992), p. 2.
20. According to nonproliferation expert Henry Sokolski, "Proliferation Pass: Stopping China and Pakistan in their nuclear tracks," *National Review Online*, March 16, 2004: "Pakistan has refused to allow the IAEA to inspect all but a handful of its nuclear facilities. President Bush not only backs this rule, but wants to toughen it by requiring NSG members to cut off nuclear sales to states that have refused to adopt the IAEA's latest, most stringent additional inspections protocol."
21. CIA, *Unclassified Report To Congress On the Acquisition of Technology Relating to Weapons of Mass Destruction*, p. 8.
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23. Ibid.
24. Ibid.
25. John Bolton, "U.S. Efforts to Stop the Spread of Weapons of Mass Destruction," testimony before the House International Relations Committee, June 4, 2003, [www.state.gov/t/us/rm/21247pf.htm](http://www.state.gov/t/us/rm/21247pf.htm) (April 6, 2004).
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## CHAPTER 6

### CHINA'S ENERGY NEEDS AND STRATEGIES

*“ENERGY. The Commission shall evaluate and assess how China’s large and growing economy will impact upon world energy supplies and the role the United States can play, including joint R&D and technological assistance, in influencing China’s energy policy.”* [P.L. 108–7, Division P, Sec. 2(c)(2)(C)]

#### KEY FINDINGS

- China is now the world’s second largest energy consumer and third largest net oil importer, increasingly dependent on outside sources, and this dependency influences China’s energy and national security policies. China has a growing sense of insecurity because of increased dependence on tanker-delivered Middle East oil via sea lanes, including the Straits of Malacca and Hormuz, controlled by the U.S. Navy.
- Reliable access to energy supplies is essential for China’s continued rapid economic growth. Shortages are even now forcing China to ration electric power supply. This has slowed down the manufacturing sector and may eventually significantly slow down overall economic growth.
- China’s approach to securing its imported petroleum supplies through bilateral arrangements is an impetus for nonmarket reciprocity deals with Iran, Sudan, and other states of concern, including arms sales and WMD-related technology transfers that pose security challenges to the United States.
- The United States can influence China’s state-controlled energy policy through technical assistance and through diplomacy. The United States can provide technical assistance to China and participate in joint research and development (R&D) aimed at developing more efficient energy sources, including clean coal technology. Through diplomacy, the United States can promote fuller integration of the PRC into the international oil security system.
- China does not have a meaningful strategic petroleum reserve today, although it is planning to address this deficiency. It does not participate in multilateral market stabilizing organizations such as the International Energy Agency (IEA) and thus benefits from global stockpiles and coordination in world energy crises and speculator-driven price spikes without incurring the attendant costs.
- China’s large and rapidly growing demand for oil is putting pressure on global oil supplies. This pressure is likely to increase in the future, with serious implications for U.S. oil prices and supplies and therefore U.S. economic security. China’s share of world oil consumption is projected to increase from almost seven per-

cent today to more than nine percent by 2020, whereas U.S. oil consumption is projected to decrease slightly and remain at almost twenty-five percent.

### OVERVIEW

China's economic trajectory has driven its expanding energy needs, which have now made it the world's second largest energy consumer behind the United States. Accompanying this growing energy demand has been a growing dependence on imported oil, with China now the world's second largest oil consumer and third largest oil importer.<sup>1</sup> These trends clearly demonstrate that China has become—and will continue to be—a major player in world energy markets.

These developments have several important implications for the United States. First, China's long-term impact on global energy supplies needs to be carefully analyzed, along with whether China's current approach to energy security is conducive to U. S. and other oil-importing countries' long-term energy strategies. Second, China's heavy reliance on coal as an energy source poses a tremendous challenge to both China and the world, as much of this consumption involves unwashed coal and has led to a surge in air pollution and emissions of greenhouse gases. Lastly, to enhance its energy security, China has entered into energy deals with a number of countries of concern, including Iran and Sudan. These arrangements are troubling, especially to the extent they might involve political accommodations and sales or other transfers of weapons and military technologies to these nations. In sum, China's growing energy demands, particularly its increasing reliance on oil imports, pose economic, environmental, and geostrategic challenges to the United States.

Moreover, China's increasing energy demands pose challenges for China's economic growth. China's export-led growth, fueled by its manufacturing sector, is dependent on energy supplies. China is experiencing increasing electric power shortages. Coal provides around two thirds of China's energy needs, but due to corruption, inefficiencies, and infrastructure problems, China, which has the world's third largest coal reserves, must now import coal in addition to growing amounts of oil and gas. Today, nineteen of thirty-one provinces are rationing electricity, and some factories are limited to a four-day week. This could take five percentage points off the expected annual industrial growth rate and reduce foreign investment.<sup>2</sup>

Proper U.S. policy in this area is a complex calculation given conflicting dynamics. On the one hand, improved energy efficiency and bringing China into the international energy system could help manage oil prices and oil crises, mitigate environmental degradation, and potentially mitigate China's outreach to certain states of concern like Iran and Sudan (and any associated weapons proliferation involved). On the other hand, it will make China's industrial base more efficient, thereby enhancing China's manufacturing competitiveness with the United States and exacerbating the concerns raised in Chapter 1 and may reduce U.S. energy leverage in the event of any U.S.-China conflict.

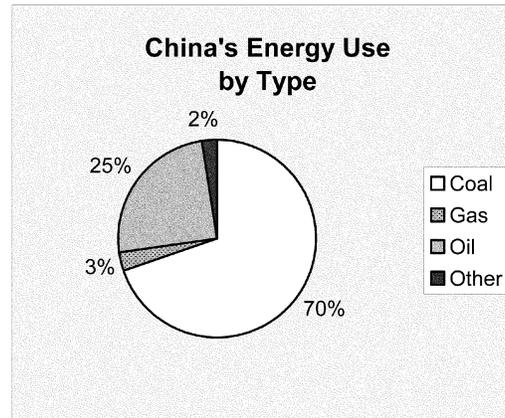
On October 30, 2003, the Commission held a hearing in Washington on China's energy needs and strategies to evaluate the impact of China's energy demands on global supplies, U.S. security interests, and possible ways in which the United States can influence China's energy policy. The Commission heard from Energy Information Administration (EIA) Administrator Guy Caruso and from energy industry analysts regarding China's role in the supplier-consumer country dynamics of the global petroleum marketplace.

## ANALYSIS AND FINDINGS

### China's Energy Supply and Demand

China's energy development and policies are directed by the central and provincial governments. These governments "maintain their hold on the energy sector through ownership of energy companies, power to approve investments, and control over energy prices. China's energy policy is based upon a 'strategic' approach which eschews dependence on markets."<sup>3</sup> China's stated energy policy goals are a reduction of reliance on imports by further diversifying the types of energy used, broadening import sources, and raising the levels of technology used in energy production and consumption. In practice, the realization of China's goal of reduced dependency will probably be limited to coal. According to EIA Administrator Guy Caruso, China's actual long-term oil security goals are the development of a strategic petroleum reserve and to "become more involved in international multinational cooperation during oil emergencies."<sup>4</sup> Today, however, progress toward these goals is minimal. China's pragmatic approach is to deal with dependency while reducing vulnerability. The strategy includes leveraging bilateral relationships with key Middle Eastern and African suppliers, building stronger ties with Russia, establishing a market position in Central Asia, and continuing energy efficiency and alternate fuel R&D programs.

According to the EIA, China's total energy consumption will increase at an average annual rate of 3.8 percent through 2020. China's oil consumption was 5 million barrels per day (mb/d) in 2001 and is expected to be 10.9 in 2025, increasing at an average annual rate of 3.3 percent a year. By comparison, the United States is expected to go from 19.6 mb/d to 29.2 mb/d, a 1.7 percent average annual increase.<sup>5</sup> Figure 6.1 presents the type of energy China used, by percent, in 2003.

**Figure 6.1 China's Energy Use by Type**

Note: See appendix A, China's Energy Trends for further detail.  
 Source: Eric Ng, "Mainland Power Producers in a Quandary," *South China Morning Post* (Hong Kong), September 10, 2003.

### Coal

China is the largest producer and consumer of coal in the world. It will remain China's dominant energy source for the foreseeable future.<sup>6</sup> After the United States and Russia, China has the world's third largest coal reserves (114 billion tons), and coal provides seventy percent of China's energy needs, including eighty-three percent of the electric power sector needs. These reserves are concentrated in China's north, northeast, and the central provinces, but energy requirements are primarily on the eastern seaboard. China is the world's second largest coal exporter. Yet, last year China imported almost eleven million tons of coal, primarily from Australia, the world's largest exporter, because it was cheaper to ship coal from Australia to China's eastern seaboard than to transport it from the Chinese interior by train. In addition, WTO entry has made access to foreign coal much easier for Chinese markets.<sup>7</sup> Sixty percent of China's coal is used in the electric power sector, increasing by fifty to sixty million tons each year. This increase is expected to be offset by the Three Gorges project, projected to produce the energy equivalent of fifty million tons of coal—or ten percent of current demand for electricity—when it is fully operational in 2009.<sup>8</sup> While China's coal imports are driven in part by delayed exploration, dropping capacity, closing of local and small mines, and infrastructure and transportation inadequacies, the main reason is the composition of China's coal reserves—its high grade coal is located in the interior, while the growth-generated power consumption is on the seaboard. While today China's growth-driven coal imports are not a geostrategic concern, future shifts in energy markets could increase pressure on supplies.

More pessimistic analyses hold that the vast bulk of China's reserves will be depleted in the near-to-medium term. Sixty-eight percent of China's coal-producing townships are in their autumn period, twelve percent are ailing, and only the remaining twenty percent have long-term production potential. Most analysts believe

that growth in demand will consistently exceed supply. According to *The Economist*, “China’s considerable coal exports can be expected to fall, and it could become a net coal importer as soon as 2005. . . . [China] ‘faces a risk of long-term coal and power shortages.’”<sup>9</sup>

Electric power drives China’s manufacturing sector. China is developing twenty gigawatts of additional power generation capacity each year to sustain export-driven economic growth.<sup>10</sup> Clean Coal Technology (CCT) is not widely implemented in China’s power industry. Many power plants are small or medium (less than three hundred megawatts in size), designed to burn low-quality (low thermal efficiency and polluting) coal. The results are high power generation costs, pollution, and insufficient generation capacity. Improving the efficiency of the coal sector could slow down the accelerating reliance on energy imports. But transportation infrastructure inadequacy, capital rationing, and water shortages restrict efforts to improve the quality of coal through greater use of coal-washing plants, as does lack of demand for better quality coal. Due to inadequate investment, there are inadequate and/or mismatched transmission capacities, i.e., an insufficient grid.

Furthermore, China has a dual pricing system for coal, which favors big cities and major power consumers. Coal prices keep rising due to mine closings and transportation cost increases, but the state-mandated electric power price is static. In spite of the inequitable pricing of coal, the “system has largely succeeded in maintaining a virtually flat electricity tariff to China’s industries and main cities.”<sup>11</sup> Power shortages likely will continue until 2007, as it will take time to build additional capacity. Some predict an eventual glut due to overbuilding, the result of a characteristic command-economy overreaction. According to Philip Andrews-Speed, the current system “is unable to cope with China’s growing energy needs. . . . Last year, a discontinuity between the pricing systems for coal and electric power caused a showdown between the two industries: the power companies were unwilling to pay the higher prices while their output prices were constrained. . . . The lack of a coherent policy for the electrical power sector will continue to be a major obstacle to investment.”<sup>12</sup>

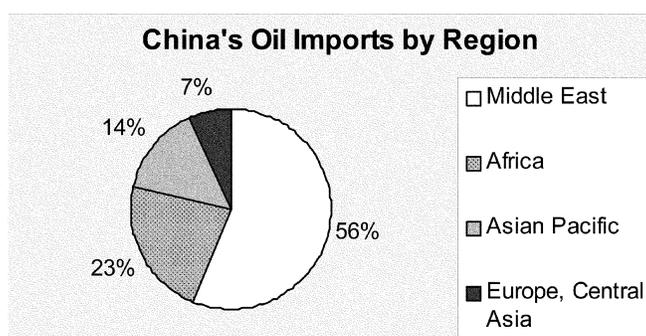
## Oil

Oil accounts for twenty-five percent of China’s energy use, and China needs to import increasing quantities to sustain growth. In the next decade, the number of vehicles on China’s roads is expected to grow to one hundred million, about one half of today’s U.S. combined car and truck total.<sup>13</sup> In mid-November 2003, China announced fuel economy standards for new cars and trucks. These fuel efficiency standards, stricter than ours, are a component of China’s comprehensive energy security policy.<sup>14</sup>

China became a net oil importer in 1993 and has overtaken Japan to become the second largest petroleum consumer after the United States. Imports are expected to rise to 738 million barrels in 2004 against a total demand of 1.993 billion barrels per year. Domestic supply has begun to plateau at around 1.240 billion barrels a year.<sup>15</sup> EIA forecasts that China’s oil imports will increase from today’s roughly two million barrels per day to nearly eight

million in 2025, or to sixty percent of China's total oil consumption. The IEA expects China's oil imports to double to four million barrels per day by 2010 and reach ten million barrels per day by 2030.<sup>16</sup> Domestic oil production is flat.<sup>17</sup> (See appendix B, "China's Projected Oil Production v. Consumption, 1990–2020.") "China is having an incredible influence on market flows, not just in Asia, but on a world-wide basis. . . . The whole center of gravity of the world energy market is changing."<sup>18</sup> This year and next, China is expected to account for one third of the increase in global oil demand in the \$1 trillion a year global oil market.<sup>19</sup> Figure 6.2 presents China's oil imports from other regions in 2001.

**Figure 6.2 China's Oil Imports by Region, 2001**



Sources: FBIS document CPP20030425000288; China State Customs Administration 2001.

The Middle East, Africa, and Central Asia are the primary areas from which China seeks to meet its long-term needs for oil imports. China is also looking for additional sources of oil and gas in Indonesia, Burma, Venezuela, Peru, and Canada. China is reducing its dependence on Middle East imports, and Angola is now its number one oil supplier.<sup>20</sup> In the Middle East, China is pressing for access to reserves in Iran, the second largest exporter in the Organization of the Petroleum Exporting Countries (OPEC) after Saudi Arabia and hoping that any new Iraqi government will stand behind oil field development contracts it negotiated with China back in 1997. In September 2003, China's main oil company, China National Petroleum Company (CNPC), signed a cooperation protocol to develop Iran's Azadegan oil field. In the past year, Chinese state oil companies have also made investments or struck deals for future investment in Algeria, Azerbaijan, Ecuador, Kazakhstan, Myanmar, Thailand, and Venezuela. China probably will be unable to gain an upstream foothold in Saudi Arabian, Kuwaiti, and United Arab Emirate (UAE) fields, already controlled by western and Middle Eastern oil companies, however. Moreover, China's territorial disputes in and around the South China Sea may be related to its expectations of potential oil reserves and may shape its future efforts to become a more dominant regional power.

Throughout the past year, China and Japan have been competing over the construction of an oil pipeline from Angarsk, Russia, to the Pacific. China wants it to go through its northeast to Daqing, one thousand four hundred miles, at a cost of \$2.5 billion. Japan

wants it to go through Russia to Nakhodka, two thousand three hundred miles, at an originally estimated cost of \$5.0 billion to \$7.5 billion. Further decisions had been put on hold since Mikhail Khodorkovsky, president of Yukos, the company backing the Daqing route, was arrested. On February 20, 2004, Russian Energy Minister Igor Yusufov announced that Russia is now studying the proposal to build the crude oil pipeline to Nakhodka. While China was concerned about a possible pullout by Russia from the agreement, *China Daily* pointed out that Yusufov's word is not final.<sup>21</sup> But it appears that Russia has finally decided to go the Nakhodka route, at an increased estimated cost of \$10 billion due to the increased cost of pipe.<sup>22</sup> Figure 6.3 presents China's oil imports by country of origin in 1994, 1999, and 2001, by percent.

**Figure 6.3 China's Oil Imports by Country of Origin, 1994, 1999, and 2001, by percent**

Import Source Country	1994 Import Amount %	1999 Import Amount %	2001 Import Amount %
Iran	*	10.8	18.0
Saudi Arabia	*	6.8	14.6
Oman	27.3	13.7	13.5
Sudan	~	~	8.3
Angola	3.0	7.9	6.3
Vietnam	4.9	4.1	5.6
Indonesia	38.3	10.8	4.4
Yemen	10.2	11.3	3.8
Equatorial Guinea	~	2.2	3.6
Russia	~	*	2.9
Kuwait	~	*	2.4
Qatar	~	~	2.2
United Kingdom	~	6.0	*
Norway	~	5.5	*
Nigeria	~	3.7	*
Iraq	~	2.7	*
Australia	*	2.5	*

Legend:

\* Denotes imports less than two percent

~ Denotes no imports

Source: China Customs Bureau.

China is the world's largest economy without a meaningful strategic petroleum reserve—seven to ten days, compared to Japan's one hundred. According to Kang Wu, an energy analyst with the

East-West Center in Hawaii and a witness at the Commission's October 30 hearing, China is addressing this problem with plans to expand its strategic reserve to fifty to fifty-five days worth of oil imports by 2005 and sixty-eight to seventy days by 2010.<sup>23</sup>

There is a clear distinction between U.S. and PRC approaches to securing oil supplies. Whereas the United States has shifted from an oil import strategy that was based upon controlling the oil at its source to one that is based on global market supply and pricing, the Chinese strategy is still focused on owning the import oil at the production point. According to James Caverly, of the U.S. Department of Energy, "[t]he U.S. strategic framework makes certain that plenty of oil is available in the world market so that the price will remain low and the economy will benefit." The Chinese policy is to own the barrel that they import "... to gain control of the oil at the source. Geopolitically, this could soon bring United States and Chinese energy interests into conflict. Both countries will be in the Persian Gulf for oil."<sup>24</sup> While China's direct investment into energy production could increase global energy supplies, its strategy of securing its own stake in an energy-exporting state, particularly in states of concern, does not appear on balance to contribute to the larger energy security picture for other energy-importing nations. According to EIA Administrator Caruso, in practice PRC equity investment has been comparatively small and not very rewarding.<sup>25</sup> To reduce its increasing dependence on the Middle East, China is diversifying and beginning to shift its energy activities toward the construction of pipelines as part of its comprehensive energy security policy.

On December 23, 2003, the State Council issued a white paper entitled *China's Policy on Mineral Resources*, which states that in order to implement former President Jiang Zemin's pledge to build a well-off society in an all-round way by 2020, China will depend mainly on the exploitation of its own mineral resources to guarantee the needs of its modernization program. The paper noted that "(a)bundant petroleum resources have been discovered in the western regions. Important discoveries have also been made in the Bohai Sea area. In the old oil fields, deeper formations will be exploited" to increase "verified oil reserves and maintain a rational rate of self-sufficiency in oil," reduce reliance upon spot trade, and encourage long-term supply contracts with foreign companies and imports from diversified sources.

The International Energy Agency (IEA), an autonomous body within the Organization for Economic Co-operation and Development (OECD), was established in November 1974 in the wake of the 1973-74 oil crisis. Energy security is its core activity. IEA member countries are committed to the maintenance and improvement of its emergency response systems. IEA gathers and analyzes statistics; administers a plan to guard member countries against the risk of a major disruption in oil supplies; coordinates national efforts to conserve energy and develop alternate energy sources as well as to limit pollution and energy-related climate change; disseminates information on the world energy market; and seeks to promote stable international trade in energy. The IEA oil security system includes maintenance by members of national emergency oil reserves and stockdraw plans, other national measures such as

demand restraint, fuel switching, and surge oil production; operation and coordination of national emergency organizations; testing response measures and training; mechanisms for industry advice and operational assistance; and a reallocation system. According to the IEA's *2002 World Energy Outlook*, IEA stocks were equivalent to 114 days of net imports. IEA importing member countries have a legal obligation to hold emergency oil reserves equivalent to at least ninety days of net imports. Since 1973, the largest oil supply disruption occurred in the 1978–79 Iranian revolution, resulting in a supply shortfall of 5.6 mb/d for six months. Today, the IEA member countries hold about 1.3 billion barrels of public oil stocks, and the IEA feels that its stockdraw potential is sufficient in magnitude and sustainability to cope with the largest historical supply disruption. The IEA cooperates with important nonmember oil-producing and -consuming countries including China.<sup>26</sup> Further involvement of China in the IEA's coordinated multilateral energy security activities could be conducive to the IEA's primary mission of energy security and end China's counter-productive spot market buying such as occurred prior to the Iraq invasion.

### **Natural Gas**

Gas use currently constitutes only three percent of total PRC energy consumption; however, some ambitious gas infrastructure projects have already been launched to support rapid growth targets. Gas infrastructure development is expensive and time-consuming and requires the assurance of future markets and a clear government gas policy and regulatory framework. China's gas reserves were estimated at 53.3 trillion cubic feet in 2002.<sup>27</sup> The political reasons for shifting to natural gas are environmental and security related (i.e., dirty coal and imported oil). Furthermore, existing gas pipelines are underutilized, because China's cities do not have adequate distribution networks to bring the piped gas to individual users.<sup>28</sup> China's natural gas demand is projected to be 2.8 billion—3.4 billion cubic feet by 2010 and 6.4 billion cubic feet by 2020—with fifty-three percent for power generation, twenty-one percent for the chemical sector, and twenty-five percent for city fuel. To meet this demand, China National Offshore Oil Corporation (CNOOC) has signed a \$12 billion, twenty-five year contract with Australia for purchase of liquefied natural gas (LNG) from Australia's North Shelf Project.<sup>29</sup> As discussed in Chapter 5, a PRC state-owned company and Iran have executed a \$20 billion, twenty-five-year LNG contract.

PRC government plans call for increased gas consumption from the current three percent to eight to ten percent (from 34 billion cubic meters [bcm] to 200bcm) by 2020. The degree of increase depends on economic growth and infrastructure development assumptions. According to the State Development and Reform Commission's Energy Bureau, this goal will require a \$26.5 billion investment in pipeline and terminal construction. Even then, domestic supplies will meet only sixty percent of the projected 200bcm demand. The rest will be imported by pipelines from Russia, Uzbekistan, Turkmenistan, and Kazakhstan, and as LNG primarily from Australia and Indonesia—in some cases involving equity investment—but also Iran, Russia, and Qatar. Several LNG

terminals are planned, meeting demand as well as supply security needs: unlike piped natural gas, LNG can be stored.<sup>30</sup> LNG is less vulnerable to terrorism than pipelines.

But, according to the IEA, cheap and abundant domestic coal remains the main competitor to increasing natural gas use, and the inadequate local gas distribution system is a major weakness in achieving the goal. According to the IEA's William Ramsay, the "key success factor is to secure paying customers, otherwise you run the risk of transporting the gas a long way for nothing."<sup>31</sup>

### **Nuclear Energy**

Today, nuclear energy provides only 1.4 percent of China's electric power sector needs. China wants to build thirty-two reactors in addition to today's operational nine by 2020. Nuclear power is expected to account for eight percent of China's future electric power needs. The request for proposals to build the initial four reactors is expected to be issued shortly. Westinghouse and the French company Areva are considered to be the chief competitors, although the existing plants are of French, Canadian, Russian, Japanese, and Chinese designs. This competition is very significant, because China has indicated it wants a standardized design.<sup>32</sup> China's increased use of nuclear energy raises concerns about whether China has sufficient capacity to handle and safeguard spent nuclear fuel.

### **Joint R&D and Technological Assistance Opportunity Areas**

As noted at the outset of the chapter, providing energy efficiency assistance to China may improve China's economic competitiveness, the subject of Chapter 1, but such programs may also work to reduce China's pressure on the world's energy (especially oil) supplies. China will continue to rely on coal as its main source of primary energy. If the PRC can use its coal more efficiently and cleanly, this increased efficiency will offset oil consumption, especially for generation of electric power. Because of coal shortages, the power sector has been increasingly relying on diesel generators. Improved coal production and power plant efficiency in China will reduce pressure on global energy supplies as well. If China can see a way out of dependency on the Middle East, it may be less motivated to enter into reciprocal relationships with states of concern in the Middle East that involve weapons and other nonmonetary concessions. Joint programs can be expected to provide opportunities for U.S. investment in the PRC energy sector (coal and nuclear-fired power plants) resulting in U.S. jobs and profits for U.S. power plant builders and spin-offs with efficiency and environmental benefits for the United States and the world.

Several types of energy technology assistance are currently feasible. The first is the Fischer-Tropsch technology or the coal gasification paraffin process that turns coal into diesel fuel. The costs of this process have dropped to around \$30 per barrel. Some companies are currently producing diesel not from coal but from slag, or waste, to transport fuel within the existing infrastructure in an environmentally friendly way. Coal gasification permits sequestration of carbon dioxide. Also, coal gasification, together with the "combined cycle,"<sup>33</sup> produces gas competitive with natural gas. Another technology uses genetically modified biocatalysts to break down cel-

lulose into transportation fuel as ethanol by using straw waste from China's rice farms as feedstocks for transportation fuel. A third possibility is thermal depolymerization—a new waste-to-fuel process that is about to be demonstrated commercially in a ConAgra processing plant in Missouri.<sup>34</sup>

The objectives of the U.S. Department of Energy (DOE)—China Bilateral Science and Technology (S&T) Cooperation are to promote energy security interests between the world's two largest energy consumers, increase market opportunities for U.S. companies and technologies, deploy clean energy technologies, leverage U.S. S&T investments through mutually beneficial cooperation, and to positively influence China's nuclear nonproliferation, export controls, nuclear safety and health, and environmental and waste management. DOE has six S&T cooperation agreements/protocols and twelve annexes with China. Areas of collaboration include the following:

1. High Energy Physics Implementing Accord
2. Protocol on Nuclear Physics and Controlled Magnetic Fusion
3. Fossil Energy Protocol
4. Energy Efficiency and Renewable Energy Protocol
5. Peaceful Uses of Nuclear Technology
6. Protocol on the Exchange of Energy Information
7. Cooperation on the Beijing 2008 Green Olympics<sup>35</sup>

Further technological cooperation projects are on the horizon. PRC fossil fuel efficiency and pollution problems can be effectively addressed by U.S. "off-the-shelf" technologies. Several other potential target areas for technological assistance include coal mining practices efficiencies, coal washing, coal bed methane, new power plant thermal efficiency, and the addition of desulphurization equipment and low NO<sub>x</sub> burners and particulate emission control equipment on power plants. Several problems hinder such cooperation. From China's perspective, there must be a direct economic, not just environmental, benefit from technology transfer to give the project high priority—not uncommon in developing countries. Further, there exists the possibility of intellectual property rights violations, an otherwise high-risk investment environment, and the PRC's underlying desire to solve problems domestically.

Most of the U.S.-China bilateral cooperative programs in the energy sector are conducted under the framework of the 1979 S&T Agreement discussed in Chapter 7.

In September 2003, U.S. Energy Secretary Abraham signed a key nonproliferation assurances agreement with China. The agreement established a process for determining the necessity of government-to-government nonproliferation assurances in relation to certain nuclear technologies. Thus, the agreement opened the door for scientific cooperation in this field, beginning with the development of the Modular High Temperature Gas Pebble Bed Reactor.<sup>36</sup>

In June 2002, Hydrocarbon Technologies, Inc., (HTI) and China's largest coal-making company, Shenhua Group, signed a \$2 billion contract under which HTI will provide technology license, process design, and technical services for construction of the direct coal liquefaction plant. With capability to produce fifty thousand barrels per day (eighteen million per year), this plant will be the second

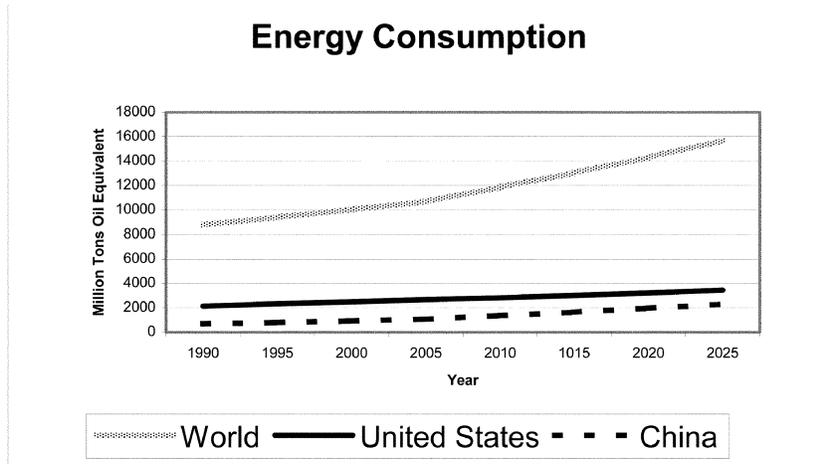
largest in the world after South Africa's Secunda plant. That plant has a capacity of twenty-five million barrels per year and was built in 1982. Construction began in 2003, and operation is to begin in 2005.

### **Global Energy Picture**

Economic growth drives global energy demand. World GDP has grown at the annual rate of 3.1 percent, from \$12.7 trillion in 1970 to \$32.2 trillion in 2001, and is forecast to grow at the same rate, to \$67.4 trillion in 2025. U.S. GDP is expected to grow at three percent per year to \$19.3 trillion by 2025, and China's GDP is expected to grow at 6.2 percent, to \$5.1 trillion in 2025.<sup>37</sup>

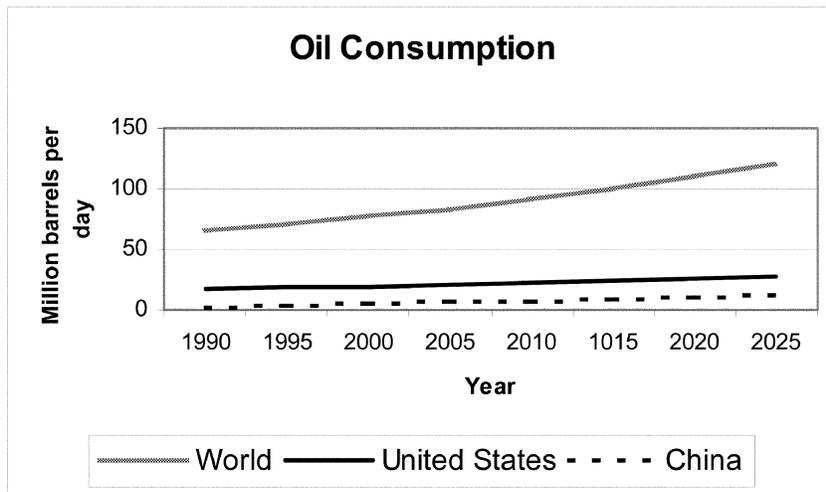
Global energy demand is projected to increase by fifty-eight percent by 2025, from 404 quadrillion British thermal units (BTUs) in 2001 to 640 quads in 2025.<sup>38</sup> See figures 6.4, 6.5, and 6.6 and appendix C, "China Energy Comparisons," for a more detailed view of future trends of China's energy consumption, energy intensity, and carbon intensity compared with the United States and the world total. Oil has been, and will remain, the foremost source of primary energy. World oil consumption is projected to increase from seventy-eight million barrels per day to 119 million barrels in 2025; sixty-one percent will be produced by OPEC and thirty-nine percent by non-OPEC countries. Natural gas is the fastest-growing source of primary energy and is projected to double and overtake coal use, increasing its share from twenty-three to twenty-eight percent. Coal use is projected to increase slowly at 1.5 percent per year, but its share of total global energy use will fall from twenty-four percent to twenty-two percent, with China and India accounting for seventy percent of the increase in coal use. Globally, coal is used primarily in electric power generation (sixty-four percent worldwide) and secondarily in key industries such as steel. According to EIA, "(o)ne exception is China, where coal continues to be the most widely used fuel in the country's rapidly growing industrial sector, reflecting China's abundant coal reserves and limited access to other sources of energy."<sup>39</sup> Globally, nuclear power as a source for electric power is expected to fall from sixteen percent in 2001 to twelve percent in 2025.<sup>40</sup> As a percent of total world energy, it will decrease from around seven percent to about five percent during the same period.<sup>41</sup> Global use of renewable energy sources is expected to increase gradually to around eight percent by 2025.<sup>42</sup> But in China, nuclear power utilization is expected to increase.<sup>43</sup>

**Figure 6.4 Energy Consumption, 1990–2025**

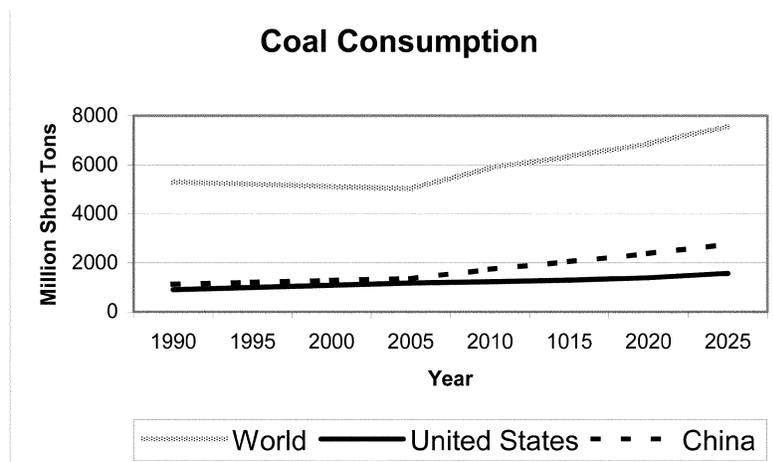


Source: Energy Information Administration, “International Energy Outlook, 2004.”

**Figure 6.5 Oil Consumption, 1990–2025**



Source: Energy Information Administration, “International Energy Outlook, 2004.”

**Figure 6.6 Coal Consumption, 1990–2025**

Source: Energy Information Administration, "International Energy Outlook, 2004."

### ***World Oil Production and Supplies***

The EIA's global oil resource base consists of three categories: remaining proven reserves (oil that has been discovered but not produced), reserve growth (increases in proven reserves that occur over time as oil fields are developed, produced, and improved technologically), and undiscovered resources (oil that remains to be found through new field exploration). Figure 6.7 presents these three categories with regard to China, the United States, OPEC and non-OPEC countries, and the world.

**Figure 6.7 Oil as a Global Energy Resource**

Country	Remaining Proven Reserves (billion barrels)	Expected Reserve Growth (billion barrels)	Undiscovered Resource Estimates (billion barrels)
China	18.3	19.6	14.6
United States	22.7	76.0	83.0
OPEC Countries	869.5	395.6	400.5
Non-OPEC Countries	396.3	334.5	538.4
World Total	1,265.8	730.1	938.9

Source: Energy Information Administration, "International Energy Outlook, 2004."

Canada's proven oil reserves have catapulted from 4.9 million barrels in 2002 to one hundred eighty million barrels in 2003 due to reclassification of Canada's oil sand resources as proven reserves as a result of dramatic reductions in production costs. Canada now has seventy-five percent of the world's oil sands, containing 1.7 trillion barrels of oil. Fifteen percent, 255 billion barrels, is recoverable. Today's production is seven hundred thousand b/d (barrels

per day), and 2025 estimated production is 2.2 mb/d, of which one half will be consumed by the United States. The reason that the numbers are not higher is lack of transportation infrastructure.<sup>44</sup> Figure 6.8 presents global oil production and reserves by country.

### Figure 6.8 Percentage of Global Oil Production and Reserves by Country

(Including adjustments due to recent Canadian developments in Canada's oil reserves)

Country	% World Production	% Reserves	Country	% World Production	% Reserves
<b>North America</b>	18.5	17.7	<b>Middle East</b>	29.2	56.5
United States	10.4	1.8	Saudi Arabia	11.6	21.5
Canada	3.3	14.8	Iran	4.8	7.4
Mexico	4.9	1.0	Iraq	2.9	9.3
<b>Africa</b>	11.1	7.6	Kuwait	2.7	8.0
<b>Asia Pacific</b>	10.6	3.2	United Arab Emirates	3.2	8.0
<b>Latin America</b>	8.8	8.1	<b>Europe</b>	9.1	1.6
<b>Eurasia</b>	12.5	6.4	<b>Other</b>	4.0	
Russia	6.8 <sup>45</sup>				

Source: Cambridge Energy Research Associates, Accenture, and Sun Microsystems, *Global Oil Trends 2003*.

Technological innovation, such as Digital Oil Field of the Future, likely will make exploration and production more exact and targeted. This would change the oil supply landscape, as physical supplies that were previously too expensive to explore will become economically feasible, expanding the world oil reserves by 125 billion barrels in the next five to ten years.<sup>46</sup> The U.N. Institute for Training and Research Centre for Heavy Crude and Tar Sands estimates that the combined global amount of Canada's and Venezuela's recoverable reserves is equivalent to the total recoverable reserves of the Middle East. At present, heavy oil is only 3.5 percent of global oil production,<sup>47</sup> but, according to an industry study, bitumen and heavy oil could make up half of the world's energy supplies by 2050.<sup>48</sup>

There are differing views regarding future oil supplies. According to the optimistic view, voiced during the Commission's October 30, 2003, hearing, the production of cheap crude will peak around 2040, allowing plenty of time for development and transition to other fuels, and therefore a shortage of conventional oil is not a long-term energy security problem.<sup>49</sup>

According to other studies, however, global production of cheap crude could peak sooner—between 2010 and 2020.<sup>50</sup> There is rising skepticism among energy experts that Saudi Arabia may not be able to provide oil at levels previously estimated. An internal Saudi

Aramco plan estimates total production capacity in 2011 at 10.15 million barrels per day, whereas the U.S. Department of Energy projects that Saudi Arabia will produce 13.6 million barrels per day in 2010 and 19.5 in 2020. Oil executives and government officials in the United States and Saudi Arabia predict that Saudi capacity may stall near current levels, potentially creating a significant gap in global energy supply.<sup>51</sup>

According to R. James Woolsey, estimates of world conventional oil reserves vary “between a trillion and two trillion barrels, depending on what probabilities you assign and how optimistic or pessimistic you are” and “the fields on the average in the world outside the Persian Gulf either have already peaked or should peak within the next very few years.”<sup>52</sup> Peaking is when half of estimated ultimately recoverable reserves have been extracted. This is a very important point for any oilfield. When this midpoint is reached, production costs tend to escalate rather sharply. Whether the world’s oil supplies peak in 2010 or 2020 depends on whether the calculation is based on the one trillion or two trillion number. When global supplies peak, there will be (1) increasing oil market dominance by the Middle East, (2) increased extraction/production costs, and (3) concurrent substantial increase in demand from the growing economies of China and India.<sup>53</sup>

One reason for the differing estimates is the definition and use of the terms “reserves,” meaning the known quantities of oil that can be readily commercially produced, and “resources,” defined as theoretical estimates of total amounts that may exist and that cannot be extracted commercially with current technology. Another is that countries and companies often misrepresent the figures for political and commercial purposes. “Oil is money and . . . reserves are oil in the bank.”<sup>54</sup>

In its most recent estimate, the IEA revised global oil demand upward by two hundred seventy thousand barrels per day to 78.3 mb/d, a 2.2 mb/d or almost three percent increase over last year, of which China’s demand was revised upward by one hundred eighty thousand barrels to a record 6.14 mb/d.<sup>55</sup> China’s surging demand growth, combined with its go-alone energy security policy, OPEC’s production cutbacks, the IEA’s reduction of the expected non-OPEC supply growth to less than 1.3 mb/d, and potential global supply instabilities will put increasing pressure on global energy supplies and prices, with resulting consequences for the U.S. economy.<sup>56</sup>

### **Geostrategic Implications**

Assessment of the amount of oil reserves and the rate of extraction does not consider supply disruptions, such as the Arab oil embargoes of 1967, 1973, and 1979 and the more recent events in Iraq, Venezuela, and Nigeria. In a global crisis situation, China’s lack of a meaningful strategic reserve and the absence of a true global safety net would put additional pressure on the market, not directly related to extraction capabilities.

According to some energy analysts, as its dependence on imported energy grows, China will become increasingly vulnerable to market disruptions. China considers the United States as its most likely potential adversary, with the capability to cut off energy sup-

plies. For this reason, it fears what it considers U.S. control of access to Middle East oil supplies. The U.S. military presence in the region contributes to this sense of insecurity. More specifically, according to Amy Myers Jaffe of the James A. Baker III Institute for Public Policy at Rice University in Houston, Texas, China is concerned that the United States will blockade either militarily or by diplomatic means China's access to oil if there were a military conflict over Taiwan, or the United States, having strong relationships with oil producers, will ask those producers to reduce supplies to China. China feels boxed in, and these perceptions drive China's policy.<sup>57</sup>

The IEA finds that China's oil policy has been to establish stable, long-term supply relationships "through reciprocal investment and non-oil trade. Its forays into Iran (with arms trade), Iraq and Sudan have raised eyebrows and concerns in other oil-importing capitals, notably Washington. The United States has energy security concerns as well, and fears that China's efforts may be destabilizing for the region as a whole." The IEA has also noted that "[r]ecently, China has tended to stress energy security more and diplomatic adventure less."<sup>58</sup>

Global oil demand has also skyrocketed, led by the United States and the PRC. China's growth has sparked economic recovery and higher oil demand in the rest of Asia. India, too, is an increasingly oil-dependent economy. Oil revenues are dollar denominated, motivating OPEC to keep supplies tight, and inventories are low. In addition, the United States has not yet recovered from the disruption in supply of crude and refined products from Venezuela last year, and there has been continued instability in Venezuela, Nigeria, and Indonesia. Royal Dutch Shell announced it was lowering by twenty percent its estimate of reserves, and there have been questions regarding the size of Saudi reserves.<sup>59</sup> Finally, this past March, OPEC announced a four percent cut in its oil output target, a move that is seen as confirming "an end of longstanding efforts to stabilize oil prices."<sup>60</sup> However, in a recent statement, Saudi oil minister Ali al-Naimi called for OPEC to raise its production ceiling by 1.5 million barrels per day.<sup>61</sup>

Some analysts believe that China's dependence on imported oil will bring the United States and the PRC closer as the result of common interests in Middle East stability. Others conclude that U.S. and PRC interests do not converge where oil is concerned, pointing out China's ties with oil-rich countries that are not on friendly terms with the United States.<sup>62</sup>

According to Philip Andrews-Speed, while the focus has been on external threats to China's energy security, "... the past year has shown that the real threats are domestic, rather than foreign. For more than twenty years, China has lacked a coherent energy policy. Energy strategies have been aggregated from the plans of individual energy industries. Coordination takes place only after the industry plans have already been drafted."<sup>63</sup>

According to Robert E. Ebel, "We are vulnerable to any event, anyplace, that affects the supply and demand of oil." In particular, the Middle East remains the world's low-cost producer and possessor of two-thirds of the global conventional oil supplies.<sup>64</sup> Meanwhile, non-OPEC resources are maturing, and OPEC market share

can only increase over the next two decades. Only by finding a viable alternative to oil will the consuming countries break their dangerous reliance on OPEC oil. Hydrogen power and bioethanol are two technologies that might provide an escape in a decade or two.<sup>65</sup>

#### RECOMMENDATIONS

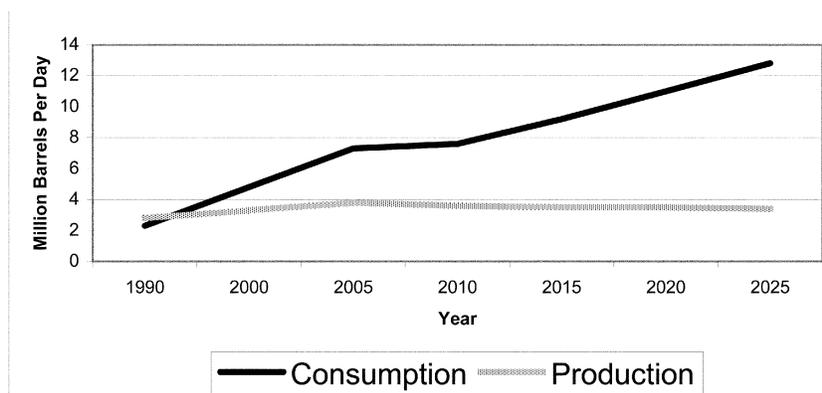
- The Commission recommends that Congress direct the secretaries of State and Energy to consult with the International Energy Agency with the objective of upgrading the current loose experience-sharing arrangement, whereby China engages in some limited exchanges with the organization, to a more structured arrangement whereby the PRC would be obligated to develop a meaningful strategic reserve, and coordinate release of stocks in supply disruption crises or speculator-driven price spikes.<sup>66</sup>
- The Commission recommends that Congress encourage work that increases bilateral cooperation in improving China's energy efficiency and environmental performance, such as further cooperation in Clean Coal Technology and waste-to-liquid-fuels programs, subject to any overriding concerns regarding technology transfers. Further, the Commission recommends that Congress direct the State and Energy departments, and the intelligence community, to conduct an annual review of China's international energy relationships and its energy practices during times of global energy crises to determine whether such U.S. assistance continues to be justified.
- The Commission recommends that the Commerce Department and USTR investigate whether China's dual pricing system for coal and any other energy sources constitutes a prohibited subsidy under the WTO and include this assessment in the Commerce/USTR report on subsidies recommended in Chapter 1.

### Appendix A China's Energy Trends, 1985–2020

	1985	1990	1995	2001	2005	2010	2015	2020	Average Annual Percent Change 1985–2020
<b>Energy Consumption (Quadrillion Btu)</b>									
Oil	4.0	4.9	7.0	10.2	11.3	13.4	15.8	19.2	4.6
Natural Gas	0.5	0.6	0.7	1.1	1.6	2.5	4.2	5.0	6.6
Coal	16.7	20.3	25.5	25.4	26.5	33.3	38.9	46.2	3.0
Nuclear	10.0	0.0	0.1	0.2	0.6	0.7	1.3	1.3	N/A
Renewables	1.0	1.3	1.9	2.8	3.2	4.6	5.2	5.9	5.3
<b>Total</b>	<b>22.2</b>	<b>27.0</b>	<b>35.2</b>	<b>39.7</b>	<b>43.2</b>	<b>54.4</b>	<b>65.5</b>	<b>77.6</b>	<b>3.6</b>
<b>Net Electricity Consumption (bkwh)</b>									
Oil (mmbd)	1.9	2.3	3.4	5.0	5.5	6.5	7.7	9.4	4.7
Natural Gas (tcf)	0.5	0.5	0.6	1.0	1.4	2.3	3.8	4.5	6.8
Coal (mst)	921	1,124	1,498	1,383	1,442	1,811	2,115	2,511	2.9
Nuclear (bkwh)	0	0	12	17	57	66	129	131	N/A
Renewables (quads)	1.0	1.3	1.9	2.8	3.2	4.6	5.2	5.9	5.3
<b>Total</b>	<b>364</b>	<b>551</b>	<b>883</b>	<b>1,312</b>	<b>1,545</b>	<b>1,966</b>	<b>2,428</b>	<b>2,986</b>	<b>6.2</b>
<b>Energy Use for Electricity Generation (Quadrillion Btu)</b>									
Oil	0.8	0.7	0.6	0.7	0.8	0.9	1.1	1.3	1.5
Natural Gas	0.0	0.0	0.0	0.1	0.3	0.7	1.0	1.0	13.0
Coal	3.4	5.4	8.4	13.7	14.5	19.3	23.9	28.7	6.3
Nuclear	0.0	0.0	0.1	0.2	0.6	0.7	1.3	1.3	N/A
Renewables	1.0	1.3	1.9	2.8	3.2	4.6	5.2	5.9	5.3
<b>Total</b>	<b>5.1</b>	<b>7.4</b>	<b>11.1</b>	<b>17.4</b>	<b>19.4</b>	<b>26.2</b>	<b>32.5</b>	<b>38.3</b>	<b>5.9</b>
<b>Carbon Dioxide Emissions (Million Metric Tons Carbon Equivalent)</b>									
Oil	76	94	132	175	194	229	271	330	4.3
Natural Gas	8	8	10	18	26	40	68	81	7.0
Coal	424	514	645	639	668	840	980	1,164	2.9
<b>Total</b>	<b>508</b>	<b>617</b>	<b>788</b>	<b>832</b>	<b>888</b>	<b>1,109</b>	<b>1,319</b>	<b>1,574</b>	<b>3.3</b>
<b>Energy Production</b>									
Oil (mmbd)	2.5	2.8	3.0	3.2	3.5	3.6	3.5	3.5	1.0
Natural Gas (tcf)	0.5	0.5	0.6	1.1	N/A	N/A	N/A	N/A	—
Coal (mst)	962	1,190	1,537	1,459	N/A	N/A	N/A	N/A	—

Source: U.S.-China Economic and Security Review Commission, *Hearing on China's Energy Needs and Strategies*, testimony of Guy Caruso of EIA, October 30, 2003, p. 18.

### Appendix B China's Projected Oil Production v. Consumption, 1990-2020



Source: International Energy Outlook, 2004.

### Appendix C China Energy Comparisons, 1985-2020

	1985	1990	1995	2001	2005	2010	2015	2020	Average Annual Percent Change 1985-2020
<b>Energy Consumption (Quadrillion Btu)</b>									
China	22.2	27.0	35.3	39.6	43.2	54.4	65.5	77.6	3.6
United States	76.7	84.6	91.5	97.0	103.2	113.3	121.9	130.1	1.5
World	311.1	348.4	368.7	404.1	433.3	480.6	531.7	583.0	1.8
<b>Oil Consumption (Million Barrels per Day)</b>									
China	1.9	2.3	3.4	5.0	5.5	6.5	7.7	9.4	4.7
United States	15.7	17.0	17.7	19.6	20.5	23.0	25.2	27.1	1.6
World	60.1	66.1	70.0	77.1	81.1	89.7	98.8	108.2	1.7
<b>Energy Consumption per Capita (Million Btu per Person)</b>									
China	20.7	23.4	28.9	30.8	32.7	39.8	46.4	53.7	2.8
United States	316.4	331.9	340.5	348.9	358.1	377.2	389.9	400.0	0.7
World	64.5	66.3	65.1	66.0	67.4	70.5	73.9	77.0	0.5
<b>Energy Intensity (Thousand Btu per 1997 U.S. Dollar of GDP)</b>									
China	75.9	63.2	46.9	33.0	27.0	24.8	22.2	19.7	-3.8
United States	13.2	12.4	11.9	10.3	9.8	9.1	8.4	7.8	-1.5
World	15.1	14.3	13.7	12.5	11.9	11.2	10.6	10.0	-1.2
<b>Carbon Intensity (Metric Tons Carbon Equivalent per 1997 U.S. Dollar of GDP)</b>									
China	1,736	1,445	1,047	693	555	506	447	400	-4.1
United States	213	198	185	166	154	144	134	124	-1.5
World	258	241	223	202	191	180	170	161	-1.3

Source: U.S.-China Economic and Security Review Commission, *Hearing on China's Energy Needs and Strategies*, testimony of Guy Caruso of EIA, October 30, 2003, p. 19.

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### **SECTION III TECHNOLOGY AND MILITARY ADVANCEMENTS**

This final section of the Report assesses China's rapid advances in technology development, military modernization, and media control. These advancements are altering bilateral and regional trade flows, the cross-Strait military balance, and, in the case of media control, the Chinese government's ability to shape perceptions of the United States and its policies.

Chapter 7 reviews the Chinese government's coordinated strategy for directing national and foreign investment into high-tech research, development and production. China's policies for attracting and directing high-tech investment have been a sustained, multiyear effort that has paid dividends for economic growth, science and technology institutions, educational infrastructure, technical levels of workers and industries, and military modernization. The United States and other foreign partners—both commercial and governmental—have contributed significantly to these developments. U.S. advanced technology and technological expertise is transferred to China in a number of ways, both legal and illegal, including through U.S. invested firms and research centers in China, Chinese investments in the United States, bilateral science and technology (S&T) cooperative programs, and Chinese students and researchers who return home following their work and study at U.S. universities and research institutes.

The U.S. government's collection of data on the shifts of U.S. high-tech investment, technology transfers, and R&D to China is inadequate. Information on U.S. transfers of technology subject to export licensing is compiled and government reporting on official S&T cooperation efforts has improved somewhat under Congressional mandate; but the overall picture of U.S. contributions to the development of China's technology growth and R&D base is not at all clear. Assessments of the implications of these shifts for the United States' longer-term technological superiority and for China's competitiveness—both commercially and militarily—are difficult to make as a result of this gap in knowledge.

In Chapter 8, the Commission reviews China's military modernization programs. Commission research and hearings indicate that China's military capabilities increasingly appear to be shaped to fit a Taiwan conflict scenario and to target U.S. air and naval forces that could become involved. China's modern arsenal includes an increasingly sophisticated nuclear missile force that is of direct strategic concern to the United States, while in the Western Pacific theater China has deployed over five hundred conventional short-range ballistic missiles that threaten Taiwan and longer-range conventional missiles that could threaten Japan and U.S. forces de-

ployed in the region. China's advanced naval and air weapons systems—including surface ships, submarines, antiship missiles, and advanced fighter aircraft—have been significantly enhanced by infusions of foreign military technology, coproduction assistance, and direct purchases, mainly from Russia and, to a lesser extent, from Israel.

Chapter 8 further considers the implications of these quantitative and qualitative military advancements for Taiwan, for the United States, and for cross-Strait relations. There is a discussion of developments in Taiwan's own defense establishment and of Taiwan's current and future defense needs in response to China's progress. Building on themes introduced in Chapter 4, China's Regional Economic and Security Impacts, this chapter confirms the importance of Congress maintaining its key oversight role in assessing Taiwan's defense needs under the Taiwan Relations Act and urges closer coordination between the administration and Congress on this matter.

In Chapter 9, the Report examines how the Chinese government continues to exercise strong controls on the dissemination of information via the public media. While there has been some loosening of controls on reporting of news relating to many areas of business and society in China, red lines remain that are dangerous for individuals or organizations to exceed.

Both for control and command purposes, the Chinese government's propaganda machinery has not withered away during twenty-five years of reform and opening; rather it has modernized. This was proven beyond doubt during the SARS epidemic of 2003. The Chinese government's intensive efforts to cover up the outbreak of SARS showed the breadth of the government's control, while the ability of many in the population to nonetheless access information about the epidemic via the Internet, text messaging, and other new media demonstrated the limitations of this control in a growing high-tech society.

Commission research, including findings of a public hearing on the subject, leads to the conclusion that the government's temporary reversal of policy to encourage accurate reporting of SARS developments did not herald a fundamental change in the Chinese government's approach to controlling the media, including information available through the Internet. The government's shift on SARS occurred primarily in response to international alarms after the outbreak had crossed national boundaries and became prominent in foreign press accounts.

Government censorship; jamming of some overseas broadcasts, including those of U.S. government-sponsored outlets like the Voice of America; blocking of foreign and domestic Internet Web sites; and punishments for those who disseminate information beyond the government's tolerance remain widespread. Open criticism of China's leaders, questioning of the Communist Party and its policies, organizational activities that are independent of government control, and anything perceived as conducive to political conduct remain taboo in the public media.

Together, these three final chapters remind us of the state-directed nature of China's growing economic, political, and military power. China channels high-technology research and development

to benefit China's defense industrial base; it directs military modernization toward coercion of Taiwan and deterrence of the United States; and it controls and uses the media to shape support for its policies and perceptions toward the United States.



**CHAPTER 7**  
**CHINA'S HIGH-TECHNOLOGY**  
**DEVELOPMENT AND U.S.-CHINA**  
**SCIENCE AND TECHNOLOGY COOPERATION**

***“ECONOMIC REFORMS AND UNITED STATES ECONOMIC TRANSFERS.*** *The Commission shall analyze and assess ... the relocation of high-technology ... and R&D facilities; [and] the impact of these transfers on United States national security ...”* [P.L. 108–7 Division P, Sec. 2(c)(2)(B)]

***“UNITED STATES-CHINA BILATERAL PROGRAMS.*** *The Commission shall assess science and technology programs to evaluate if the United States is developing an adequate coordinating mechanism with appropriate review by the intelligence community with Congress; [and] assess the degree of non-compliance by China and United States-China agreements on ... intellectual property rights ...”* [P.L. 108–7, Division P, Sec. 2(c)(2)(G)]

**KEY FINDINGS**

- The Chinese government has a coordinated, sustainable vision for science and technology development. Many Chinese high-technology developments have been spurred by policies the Chinese government has instituted to accelerate the growth of industries in this sector, which the government believes can help lift the whole economy.
- The Chinese government uses foreign investment, tax policies, subsidies, technology standards, and industry regulation to accelerate the nation’s technological growth. It uses government procurement and proprietary technology standards to advance its technology growth policies. These policies make it difficult, if not impossible, to achieve a level playing field in this area of U.S.-China trade.
- Global production networks dominate China’s high-tech export environment. Foreign investment into China has provided capital, management, and technology to Chinese production in various technology sectors. Taiwan firms are key investors and intermediaries in China’s high-tech production networks.
- U.S. trade and investment with China has played, and continues to play, a key role in China’s technological advancement. U.S. advanced technology and technological expertise is transferred to China, through both legal and illegal means, via U.S. invested firms and research centers in China, Chinese investments in the United States, bilateral science and technology (S&T) cooperative programs, and the tens of thousands of Chinese students and re-

searchers at U.S. universities and research institutes who return to China after completing these programs.

- Large-scale piracy—at levels of over ninety percent—continues to characterize intellectual property rights (IPR) protection in China and is a major concern for U.S. exporters of high-tech goods and services. While the government has instituted laws to strengthen IPR protection, the enforcement of those laws has suffered from a lack of government coordination and from local protectionism and corruption.

#### OVERVIEW

China's technology development, including its growth as a producer of high-tech goods and services and as a center for research and development (R&D) activities is a significant component of China's overall economic development that has important implications for U.S. economic and security interests. China's technology advancements are directly related to its economic engagements with the United States and other trading partners, who have shared technology via trade, investment, government-to-government cooperative programs, and research and academic exchanges.

China has become a pivotal player in the global supply chain for high-tech goods and services and continues to receive high levels of foreign direct investment (FDI) in this sector. At the same time, foreign firms are increasingly looking at China as a cost-effective locale for conducting R&D activities as well as manufacturing, given the growing numbers and sophistication of Chinese engineers and scientists. Moreover, China's technological advancements have been bolstered by U.S.-China government-to-government science and technology cooperative programs and by the large numbers of Chinese students and researchers engaged in advanced technology work at U.S. universities and research institutes. This dynamic—the U.S. role in China's technological advancement—is significant and merits monitoring and assessment, particularly where the technologies involved may have significant implications for technological competitiveness and military applications. The U.S. government has various programs and mechanisms in place to monitor and regulate these activities, namely the S&T Cooperation Agreement, the Committee on Foreign Investments in the United States (CFIUS), and export control policy in general, but the sufficiency of these programs and mechanisms remains in question. Given the trajectory of China's technology development, it is essential that the U.S. government fully understands this development and the challenges it poses for U.S. technological competitiveness and security.

On February 12–13, 2004, the Commission held a two-day field hearing, *China as an Emerging Regional and Technology Power*, to examine China's high-tech development and its implications for the Asian region and U.S. economic and security interests. During this field hearing, held on the campus of the University of California, San Diego, the Commission heard testimony from a number of scholars and representatives of California's high-tech community on the themes of China's high-tech development programs, China's role in the global supply chain for high-tech goods and services, the

impact of China's growth in this area on Asian regional economies, and appropriate U.S. policy responses to these developments.

#### ANALYSIS AND FINDINGS

##### **China's Focused High-Tech Development Strategy: Modernizing the Military and Directing FDI**

The Chinese government has a coordinated, sustainable vision for science and technology development. Many Chinese high-technology developments have been spurred by policies the Chinese government has instituted to accelerate the growth of industries in this sector, which the government believes can help lift the whole economy.

Since the late 1970s, China's leaders have believed that a broad-based modernization of the whole economy will sustain long-term military modernization. "During the 16th Party Congress [2002], China's leaders reaffirmed their primary commitment to economic development and their continued support for military modernization."<sup>1</sup> In practice, this translates into the intersection of civilian and military technological development. For example, the Chinese Academy of Sciences conducts research with various institutions on engineering, remote sensing, semiconductors, and lasers throughout China in cities with a strong defense industrial base. As a result, there is close collaboration with the military in "applied research, with products funded or developed for use by the military."<sup>2</sup>

The PRC launched the National High Technology Research and Development Program of China (863 Program) in March 1986. Its mission is to focus on strategic, forefront, and foresighted high technology that can benefit China's long-and medium-term development.<sup>3</sup> Major areas influenced by the 863 Program are biotechnology, space technology, information technology, laser technology, automation technology, energy technology, and advanced materials. The program was initially proposed by China's strategic weapons scientists, and its continued emphasis on "strategic civil and military technology development and its stated objective of achieving technological parity with the industrialized nations has made it, at times, a controversial prospect for foreign investment."<sup>4</sup> The R&D funding for a project under the 863 Program usually comes from various channels, including government, industry, and private entities.<sup>5</sup>

The 863 Program has provided a more streamlined form of funding that enables the Chinese government to target specific goals through directed R&D spending. The 863 Program funds are allocated directly to 863 experts rather than through a large bureaucratic system. Thus, the government is able to fast-track its S&T priorities. For example, space technology advancements from the relevant 863 expert committees contributed to the recent success of China's manned space program.<sup>6</sup> Outside of the 863 Program, official Chinese R&D funding takes place through regular S&T line items in the ministerial or state budget; block grants allocated to these entities; and through commercial fund-raising ventures established between labs and enterprises.<sup>7</sup>

The growth of China's domestic R&D capacity has also been bolstered by a government strategy to encourage FDI in particular areas and regions. For example, foreign computer and telecom companies established centers, programs, and labs in China, encouraged by the government's tax and other investment incentives expressly provided to entice those industries. Moreover, Chinese firms in these industries have pursued a strategy of partnering with multiple foreign firms to extrapolate the broadest array of technological capabilities from all firms involved.<sup>8</sup>

Foreign high-tech R&D investment in China experienced a quick transformation throughout the 1990s. From the early to mid-1990s, foreign R&D investment was best characterized as exploratory, strategic investment. During the middle of the decade, China's information technology (IT) market was opening further to foreign investment and growing increasingly competitive. In the period after China's accession into the WTO in 2001, many companies have been exploring their interests in moving up the value-added production chain and seeking a local R&D base.<sup>9</sup>

Dean Peter Cowhey of the University of California, San Diego, testified before the Commission that China's technological advancement currently involves a substantial pool of scientists and engineers who are focused on achieving advances in technology. When looking at China's high-tech R&D, one must take note of the speed and the depth of those advances. China thus far has demonstrated periodic spurts of technological growth in the R&D stages of development, but over the long term it will require consistent, quality growth to affect a genuine rise in the nation's technological position in the world.<sup>10</sup> China devotes only five percent of its R&D spending to basic research, focusing the rest on applied R&D for the purpose of immediate economic development.<sup>11</sup> In addition, the development of China's R&D sector is in part hindered by the state's inability to enforce IPR protection. China's failure to protect IPR has limited investment and technology transfer decisions by some foreign firms in the technology sector.<sup>12</sup>

Taking the pharmaceutical industry as an example, Dr. Lee Zhong of NatureGen, Inc., testified that China is the second largest pharmaceutical ingredient manufacturer and supplier in the world, but most of this production to date has been in the generic field. To produce genuine advancement in the pharmaceutical field, the Chinese pharmaceutical industry needs to expand R&D to develop its own products, increase efficiency, and develop quality control. While products manufactured by China's pharmaceutical companies have been principally generic, foreign investment and the transfers of technology and management systems that accompany this investment are accelerating the growth of a more sophisticated pharmaceutical industry. Foreign manufacturers of pharmaceuticals are beginning to establish R&D facilities in China. The United States is the second-largest investor in the China pharmaceutical industry after Hong Kong.<sup>13</sup>

The biotech industry in China is also growing, and the government is supporting its development. The Commission was told by one U.S. biotech industry executive that the Chinese government was supporting its biotech industry through the annual investment of more than \$600 million into universities, research centers, and

labs and encouraging Chinese nationals who have obtained doctorates in the life sciences field in the United States to return to China by offering them incentives, such as associate professorships, to do so.<sup>14</sup>

China is also attracting R&D investment into biotechnology from Taiwan. The Commission heard testimony that while the Taiwan biotech industry is relatively strong, more investment from both the Taiwan government and the private sector is now going to the mainland. This investment, in combination with Beijing's own investment in biotech, has allowed China's biotech industry to grow upwards of thirty percent a year, and the rate is increasing, while Taiwan's biotech industry has grown about twenty-five percent annually over the last five years and is slowing down.<sup>15</sup>

The Chinese government plays a large role in China's high-tech development, and its technology policy utilizes standards as leverage to build the industry as a whole. Dean Cowhey testified that China has "employed proprietary technology standards to shift the terms of competition in favor of Chinese technology."<sup>16</sup> If foreign companies adopt Chinese-promulgated standards to get access to the growing Chinese market, they help build economies of scale, which then encourages the growth of exports out of China with these new standards. The Chinese government also uses its power over state-owned enterprises (SOE) and over companies that require licenses to produce or provide services, to organize bargaining cartels with foreign corporations to encourage technology transfers into China.<sup>17</sup> This use of proprietary technology standards has become a new means of coercing technology transfers, replacing the customary forced technology transfers that China agreed to end in its WTO agreement. Further discussion of forced technology transfers can be found in Chapter 2.

In addition to these concerns, high-tech investments into China have the potential to contribute to the development of militarily significant technologies.<sup>18</sup> China's current emphasis on information warfare in its military doctrine, discussed in greater detail in Chapter 8, makes the presence of investment in possible dual-use military technology particularly alarming.

### **China's Prominent Role in Global High-Tech Supply Chains**

Since 1990, China's total exports have grown eightfold, to more than \$380 billion in 2003, with its exports in the electronics industry accounting for thirty percent of Asia's total in that sector.<sup>19</sup> The share of China's exports related to high-tech goods has increased dramatically over the past decade. For example, electronics, machinery, and transport equipment have gone from 18.1 percent of China's exports in 1994 to 42.9 percent of its exports in 2003, an increase of 24.8 percent.<sup>20</sup> Of this amount, exports of office and data processing machines (which include computers and computer components) increased by 12.1 percent, electric appliances by 4.8 percent, and telecommunications equipment by 4.7 percent.<sup>21</sup> In addition, R&D performed in China by majority-owned foreign affiliates of U.S. companies in 2001 totaled \$506 million (up from \$7 million in 1994), making China the eleventh largest recipient of U.S.-owned foreign R&D expenditures.<sup>22</sup> Figure 7.1 shows the U.S. trade deficit with China in technology goods from 1991 to 2003.

**Figure 7.1 U.S. Advanced Technology Products (ATP)\*  
Trade with China**



\*As Defined by the U.S. Department of Commerce.<sup>23</sup>  
Source: U.S. Census Bureau

Trade and investment flows in the Asian region have undergone a major shift in the past decade. In the 1980s and early 1990s, capital goods and components “were shipped from Japan to Asia’s newly industrializing countries for processing and then exported to industrial countries. China’s opening to trade has added a link in this chain. Capital goods are now shipped to Taiwan and South Korea; capital-intensive components are then sent to China and elsewhere in Asia for labor-intensive processing and assembly, before being reexported to developed markets.”<sup>24</sup>

This new trade pattern has changed the pattern of China’s imports. Whereas between 1995 and 2000, China’s total imports for domestic demand almost doubled to \$78.8 billion, its imports for reprocessing nearly tripled to \$81.9 billion. China is now running trade deficits with eastern Asia and trade surpluses with North America and Europe. According to Chinese data, China currently has trade deficits of \$31.5 billion with Taiwan, \$13.1 billion with South Korea, \$7.6 billion with the ASEAN, \$5 billion with Japan, and \$1.3 billion with Australia.<sup>25</sup>

Specifically in high-tech sectors Asian countries worry about losing their competitive edge to China especially in high-technology markets.<sup>26</sup> For example, the new trend for Japanese FDI to China is that electronics companies make high-profile investments to produce high-end consumer products. China is thus acquiring a full-set industrial structure at the expense of Japan.<sup>27</sup> The Commission was told that since 1998, “a third to a half of Japan’s China-bound FDI was in the high-tech sector, particularly in electrical machinery and electronics.”<sup>28</sup>

The Commission heard testimony from Jason Dedrick of the University of California's Irvine Center for Research on Information Technology and Organizations concerning the electronics manufacturing trade between the United States and China. He testified that China's growth as a world computer manufacturer did have some positive effects on the U.S. industry in the 1990s. First, by developing production networks in Asia, U.S. companies were able to compete with the Japanese. Second, U.S. companies were able to pass off low-value, low-margin manufacturing to Asia and keep higher-profit, higher-margin industries in the United States. And finally, the IT productivity boom of the late 1990s was made possible through lower-cost hardware.<sup>29</sup>

Taiwan and the United States are the main foreign actors that shape China's role in global trade and investment patterns in high-tech goods. The U.S. contribution to this chain has traditionally been at the front in the innovation and development of new technologies and platforms, creating and determining the technologies to be traded. Thus, the U.S.-Taiwan-China trade and investment triangle, according to testimony by Professor Barry Naughton of the University of California, San Diego, allows U.S. companies' technology products and design platforms to dominate the global arena.<sup>30</sup> However, the Chinese government is now taking measures that have created tensions with U.S. high-tech companies.<sup>31</sup> China is developing its own domestic software standards for wireless computers, introducing exclusive technology formats for cell phones and DVD players, drafting standards for radio frequency identification, and using tax policies to benefit domestic production of semiconductors.<sup>32</sup> This latter action is the subject of the first U.S. WTO dispute brought against China, which is discussed in Chapter 2.

Taiwan's high-tech investment into China carries unique economic and security concerns. John Tkacik testified to the Commission that

*In a top secret report entitled, "An Analysis on how the Chinese Communist Party Attracts Taiwanese High Tech Investment for the Suzhou Industrial Park," Taiwan's intelligence agency reported in July 2001, that the Chinese authorities have a blueprint to actively develop semiconductor and high-tech industry 'clusters' which include the entire spectrum of each industry. The result, the report said, was that China has effectively attracted the key sectors of Taiwan's computer industry, from downstream component makers like computer motherboard and monitor producers to PC cases and mouse makers. The report suggested that the Taiwan-invested high-tech sector would be a virtual 'puppet' of Beijing and recommended that the Taiwan government adopt policies to curb high-tech investment in China. Indeed, the one high-tech area in China which Taiwan's government still prohibits local investors from investing is semiconductor fabrication, but that ban, too, appears to be eroding.<sup>33</sup>*

A recent report on Taiwan's semiconductor industry issued by the U.S.-Taiwan Business Council detailed the challenges China poses for Taiwan's industry. According to the report, more and

more integrated circuit design firms are now choosing to have their chips fabricated in China rather than Taiwan in order to avoid the extra cost.<sup>34</sup> Taiwan government policies to curb the relocation of high-tech manufacturing to China have failed.<sup>35</sup>

In addition, the U.S. national security establishment is concerned over competition with China's high-tech industry, specifically its semiconductor industry, and by China's attraction as a low-cost, high-tech manufacturing center. As an example of this concern, the U.S. Department of Defense and the National Security Agency have "partnered with IBM to ensure on-shore manufacturing of critical semiconductor products over the next ten years .... There is a very significant concern within the Department of Defense and the national security community generally about the erosion of U.S. domestic production and the growth in Chinese domestic production."<sup>36</sup>

In these global supply trends, the United States presently tends to perform the most complex manufacturing, while more routine manufacturing is parceled out for lower-cost overseas production. While there is insufficient data at the moment to make an empirical case that the United States is in danger of losing its high-tech manufacturing sector to overseas competition,<sup>37</sup> some alarming trends in R&D deserve greater attention.

The U.S. ability to be an R&D leader and maintain an innovative edge is based on the national pool of intellectual capital. In 2002, five percent, or 59,000, of all bachelor degrees awarded in the United States were engineering degrees. By comparison, thirty-nine percent, or 219,000, of China's bachelor degrees awarded were in engineering.<sup>38</sup> Total graduate engineering enrollment in the United States in 2002 was 109,506, of whom 51,910 were foreign students.<sup>39</sup> While the United States has not yet lost its superiority in innovation, many believe that it must put a new focus on enhancing its pool of intellectual capital, or it will lose its competitive edge within a generation.<sup>40</sup>

### **Ineffective Intellectual Property Rights Protection**

The International Intellectual Property Alliance (IIPA) reported in September 2003 that IPR abuses in China continue unabated. In 2002, the piracy levels remained at ninety percent or above, translating to a \$1.8 billion loss to the pirated industries, according to IIPA.<sup>41</sup>

Three major technology product sectors largely susceptible to this lack of adequate IPR protection are the optical media, Internet, and business software technologies. Optical media plants produce pirated CDs, VCDs, and DVDs at a rampant pace. According to the Motion Picture Association of America, 95 percent of the video discs in China are pirated.<sup>42</sup> Web sites devoted to pirated MP3 files are on the rise, particularly among the young consumer base. And the business software industry suffers from unauthorized copying from companies and even government entities.<sup>43</sup> Figure 7.2 shows the estimated U.S. trade losses due to Chinese piracy in 2001–03.

**Figure 7.2 Estimated Trade Losses Due to Piracy in China, 2001–2003**

(millions of U.S. dollars)

Industry	2003	2002	2001
Business software applications	NA	\$1,637.3	\$1140.2
Entertainment software	568.2	NA	455.0
Records & music	286.0	48.0	47.0
Motion pictures	178.0	168.0	160.0

Source: IIPA, “2004 Special 301: People’s Republic of China,” (Washington, DC: IIPA, 2004).

The WTO’s Council for Trade-related Aspects of Intellectual Property Rights (TRIPS Council) has found that while China has approved new laws to improve its IPR protections, such as amendments to the Patent Law Implementing Measures, Rules on the Determination and Protection of Well-Known Trademarks, and the drafting of revisions to the 2001 Internet-related implementing rules, enforcement is lacking.<sup>44</sup> In particular, the Chinese government suffers from a lack of “coordination among Chinese government ministries and agencies, local protectionism and corruption, high thresholds for criminal prosecution, lack of training and weak punishments.”<sup>45</sup> A further discussion of TRIPS and IPR as it relates to the WTO can be found in Chapter 2.

### **Acquisitions of U.S. Technology**

U.S. technology and expertise have been transferred to China through a variety of channels: U.S. firms’ investment and joint venture projects in China, including R&D projects; Chinese firms’ investments in the United States; cooperative exchange programs between U.S. and Chinese scientists and engineers; and education and employment opportunities for Chinese nationals in U.S. universities and research institutes. The Commission is concerned that as China’s economic power expands, its ability to acquire advanced U.S. technology and production facilities will increase exponentially. There is a need for the U.S. government to monitor these technology transfers in a more comprehensive and coordinated manner.

### ***The S&T Agreement***

The U.S. government entered into a formal government-to-government S&T cooperative program with China beginning in 1979. Under the U.S.-China Agreement on Cooperation in Science and Technology, the two countries have conducted numerous collaborative projects under the auspices of eleven federal agencies and branches. The agreement covers diverse fields such as basic research in physics, energy-related projects, civil industrial technology, and digital mapping. In a 2002 report to Congress on these programs, the Department of State concluded that the majority of programs under the agreement have been in the “benign civilian domain” and that “while it is possible that there may have been some bleed-over into the military sphere, such unintended side effect is difficult to document or substantiate.”<sup>46</sup> A chart of U.S.-

China active protocols, agreements, memoranda of understanding, and annexes operative from 1997 to 2001 is in appendix A.

In its 2002 Report, the Commission noted that there was “no centralized mechanism for coordinating, funding or reporting to Congress on the various cooperative programs occurring” between government agencies and Chinese entities.<sup>47</sup> Accordingly, the Commission recommended in its 2002 Report that the State Department conduct these reviews biennially. Congress approved this recommendation, and it is incorporated in P.L. 107–314 (sec. 1207). The reporting requirement includes an accounting of all activities conducted under the agreement and a projection of activities to be undertaken under the agreement during the next two years; a determination by the Secretary of Defense, in consultation with the director of Central Intelligence, of the extent to which the activities conducted under the agreement have enhanced the military and defense industrial base of the PRC and an assessment of the effect that projected activities under the agreement could have on the PRC’s economic and military capabilities; and a determination by the inspector general of the extent to which activities under the agreement provide access to technology, information, or expertise that could enhance the PRC’s military capabilities; and the extent to which activities under the agreement comply with U.S. export control laws. The law also directs the president to establish an interagency working group to oversee implementation of the agreement.

The first report under this legislation was due April 1, 2004. As of the writing of the Commission’s Report, the Department of State had yet to issue its 2004 Report. The Commission intends to closely review and evaluate the findings of this report and recommend, where appropriate, legislative action to address identified problems.

### ***Investment in the United States and CFIUS***

The United States has in place export control laws designed to protect transfers of designated technologies critical to U.S. national security. Additionally, a process implemented through the interagency Committee on Foreign Investment in the United States (CFIUS) is an important tool to ensure that while the United States maintains an open investment climate, U.S. technology critical to national security is not lost through foreign acquisitions of U.S. companies.

In 1988, Congress provided the CFIUS with the authority to review, investigate, and block potential threats to U.S. national security resulting from foreign acquisitions of U.S. companies. Foreign entities voluntarily report such acquisitions because, once reviewed, they are given “safe harbor.” However, those not reported are forever subject to a government-ordered divestiture should national security concerns surface. Unknown, however, is whether certain acquisitions may either go unnoticed or fall outside existing criteria but still pose security issues for the United States.

Given the increasingly open trading relationship between the United States and China, and the impact of China’s investments in the United States, the Commission is concerned over the adequacy of CFIUS’s reach. Are the current criteria used in the CFIUS proc-

ess to evaluate technology transfers and their potential impact on national security adequate? Are enhanced monitoring procedures needed? The CFIUS review focuses solely on traditional national security concerns with investments, while failing to consider U.S. economic security interests.

The Commission is planning future research and hearings into the security dimensions of China's acquisitions by various means of U.S. advanced technology, including an assessment of the adequacy of interagency coordination and consultation on this issue through CFIUS and other interagency structures. As part of this examination, the Commission intends to assess whether current standards for determining security concerns are sufficient.

#### **RECOMMENDATIONS**

- The U.S. government must develop a coordinated, comprehensive national policy and strategy designed to meet China's challenge to the maintenance of our scientific and technological leadership. America's economic competitiveness, standard of living, and national security are dependent on such leadership. The Commission therefore recommends that Congress charge the administration to develop and publish such a strategy in the same way it is presently required to develop and publish a national security strategy that deals with our military and political challenges around the world. In developing this strategy, the administration should utilize data presently compiled by the Department of Commerce to track our nation's technological competitiveness in comparison with other countries.
- The Commission recommends that Congress revise the law governing the CFIUS process (Title VII of the Defense Production Act)—which gives the president authority to investigate mergers, acquisitions, or takeovers of U.S. firms by foreign persons if such activities pose a threat to national security—to expand the definition of national security to include the potential impact on national economic security as a criterion to be reviewed. In this regard, the term national economic security should be defined broadly without limitation to particular industries.
- The Commission recommends that Congress direct the administration to transfer chairmanship of CFIUS from the Secretary of the Treasury to the Secretary of Commerce.

### Appendix A

#### U.S.-China Active Protocols, Agreements, Memoranda of Understanding (MOU), and Annexes Operative from 1997 to 2001

Agency	Protocol, Agreement or MOU	Annex
<b>Department of Energy</b>	High Energy Physics Implementing Accord	
	Protocol on Nuclear Physics and Controlled Magnetic Fusion Research	
	Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization	<ul style="list-style-type: none"> <li>• Annex I: Rural Energy Development</li> <li>• Annex II: Wind Energy Development</li> <li>• Annex III: Energy Efficiency</li> <li>• Annex IV: Renewable Energy Business Development</li> <li>• Annex V: Exploratory Research for Advanced Batteries and Ultracapacitors</li> <li>• Annex VI: Geothermal Production and Use</li> <li>• Annex VII: Renewable Energy Policy and Planning</li> </ul>
	Fossil Energy Protocol	<ul style="list-style-type: none"> <li>• Project Annex I: Cooperation in the Area of Power Systems</li> <li>• Project Annex II: Cooperation in the Area of Clean Fuels (not yet signed)</li> <li>• Project Annex III: in the Areas of Oil and Gas</li> <li>• Project Annex IV: Cooperation in the Areas of Environmental Technologies</li> <li>• Project Annex V: Climate Science</li> </ul>
	Agreement on Peaceful Uses of Nuclear Technologies	
	Protocol on Exchange of Energy Information	
	The U.S.-China Energy and Environment Technology Center	
<b>Department of the Interior</b> <i>Minerals Management Service</i>	Memorandum of Understanding on Mineral Resource Management Information Sharing	

**Appendix A—Continued**  
**U.S.-China Active Protocols, Agreements, Memoranda of Understanding (MOU), and Annexes Operative from 1997 to 2001**

Agency	Protocol, Agreement or MOU	Annex
<i>Fish and Wildlife Service</i>	The Protocol on Cooperation and Exchanges in the Field of Conservation of Nature	Memorandum of Understanding on Water Resources Management and Conservation
<i>Bureau of Reclamation</i>  <i>U.S. Geological Survey</i>	Earth Sciences Protocol	<ul style="list-style-type: none"> <li>• Annex I: Sediment-Hosted Gold Deposits of the United States and China</li> <li>• Annex II: Collaborative Studies of the Major Mineral Deposits, Metallogenesis, and Tectonics of Northeast China</li> <li>• Annex III: Collaborative Studies of the Human Health Impacts of Domestic Coal Use in China and the United States</li> </ul>
	The Earthquake Studies Protocol	<ul style="list-style-type: none"> <li>• Annex I: Investigations of Premonitory and Phenomena and Techniques for Earthquake Prediction</li> <li>• Annex II: Investigation of Intra-plate Active Faults and Earthquakes</li> <li>• Annex III: Cooperative Research on Earthquake Engineering and Hazards Mitigation</li> <li>• Annex IV: Cooperative Research Projects on Deep Crustal Structure</li> <li>• Annex X: Cooperative Research Projects on Laboratory Studies in Rock Mechanics</li> <li>• Annex XI: Deployment of Very Long Period Seismograph Stations and Cooperative Research</li> <li>• Annex XII: Exchange of Data and Films of Seismograms</li> </ul>
	The Protocol for Scientific and Technical Cooperation in Surveying and Mapping Studies	<ul style="list-style-type: none"> <li>• Project Annex I: Scientific and Technical Cooperation in Surveying and Mapping Studies Concerning Developing Geographic Information Systems</li> <li>• Project Annex II: Surveying and Mapping Studies in the Application of Remote Sensing Information</li> </ul>

**Appendix A—Continued**  
**U.S.-China Active Protocols, Agreements, Memoranda of Understanding (MOU), and Annexes Operative from 1997 to 2001**

Agency	Protocol, Agreement or MOU	Annex
<i>U.S. Geological Survey</i>		<ul style="list-style-type: none"> <li>• Project Annex IV: Scientific and Technical Cooperation in the Application of Geodetic and Geophysical Data to Mapping, Charting, and Geodetic Programs</li> </ul>
	The Surface-Water Hydrology Protocol	<ul style="list-style-type: none"> <li>• Project Annex I: Interchange of Scientific and Technical Information on Hydrology and Analytical Techniques of Water Resources Study</li> <li>• Project Annex II: Hydrologic Measurement Procedures, Instruments, and Equipment</li> <li>• Project Annex IV: Cooperative Project on Sediment Transport</li> <li>• Project Annex XI: Cold Regions Hydrology</li> <li>• Project Annex XII: Water Quality</li> </ul>
<b>Department of Commerce</b> <i>National Oceanic and Atmospheric Administration</i>	Protocol on Cooperation in the Field of Marine and Fisheries Science and Technology	
	Protocol on Cooperation in the Field of Atmospheric Science and Technology	
<i>Technology Administration</i>	Protocol on Cooperation in Civil Industrial Technology and Scientific and Technical Information	<ul style="list-style-type: none"> <li>• Annex II: Cooperation in Civil Industrial Technology</li> </ul>
<b>Department of Agriculture</b> <i>Foreign Agricultural Service</i> <i>Agricultural Research Service</i> <i>U.S. Forest Service</i>	Understanding on Agricultural Exchange	
	Joint Operating Agreement on Biological Control	
	Memorandum of Understanding on Forestry Cooperation	
<b>Nuclear Regulatory Commission</b>	Protocol on Cooperation in Nuclear Safety Matter	

**Appendix A—Continued**  
**U.S.-China Active Protocols, Agreements, Memoranda of Understanding (MOU), and Annexes Operative from 1997 to 2001**

Agency	Protocol, Agreement or MOU	Annex
<b>National Science Foundation</b>	The Basic Science Protocol	
	The Earthquake Studies Protocol	
	Memorandum of Understanding on Ocean Drilling	
<b>Department of Health and Human Services</b>  <i>National Institutes of Health</i>	Memorandum of Understanding on AIDS	
	Memorandum of Understanding on Cooperation in the Basic Biomedical Sciences	

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**CHAPTER 8**  
**CHINA'S MILITARY MODERNIZATION**  
**AND THE CROSS-STRAIT BALANCE**

***“REGIONAL ECONOMIC AND SECURITY IMPACTS.***  
*The Commission shall . . . review the triangular economic and security relationship among the United States, Taipei and Beijing, including Beijing's military modernization and force deployments aimed at Taipei, and the adequacy of United States executive branch coordination and consultation with Congress on United States arms sales and defense relationship with Taipei.”* [P.L. 108-7, Division P, Sec. 2(c)(2)(F)]

**KEY FINDINGS**

- There has been a dramatic change in the military balance between China and Taiwan. In the past few years, China has increasingly developed a quantitative and qualitative advantage over Taiwan.
- The People's Liberation Army (PLA) continues to acquire military capabilities aimed at intimidating Taiwan and deterring the United States from intervening on Taiwan's behalf in the event of a Taiwan Strait crisis. It appears the Chinese buildup is designed to forestall measures that China perceives as steps toward independence by Taiwan and to coerce Taiwan to end the island's continued separate status. A significant component of China's military modernization strategy is to develop sufficient capabilities to deter U.S. military involvement in any cross-Strait conflict and to prevail even if the United States becomes involved.
- China's ballistic missile force consisting of between five hundred to five hundred fifty missiles with an annual increase of some seventy-five is a destabilizing factor in the trilateral relationship between the United States, China, and Taiwan. These missiles directly threaten Taiwan, while China's longer-range conventional missiles could also threaten Japan and U.S. forces deployed in the region.
- China's submarine acquisition and development program represents an increasing threat to U.S. naval operations, either in support of Taiwan or regional operations in the Western Pacific and South China Sea.
- A key element of China's military modernization program has been extensive acquisitions of foreign military technologies, particularly from Russia. Removal of the EU arms embargo against China currently under consideration would accelerate weapons modernization and dramatically enhance Chinese military capabilities and might lead Russia to authorize the export of even more sophisticated systems to China.

- The Taiwan Relations Act (TRA) gives Congress a unique oversight role in assessing Taiwan's defense needs. While there has been some recent improvement in terms of consultations, the Commission believes that executive branch coordination with Congress in this area has not been sufficient to allow Congress to fully exercise its important joint policymaking role in formulating U.S. defense assistance policy toward Taiwan.

### OVERVIEW

The complex set of relations among the United States, China, and Taiwan requires careful diplomacy, a strong defense, and continued assessment by the United States of the military balance between the two sides. The central goal of the United States' Asia-Pacific policy is to preserve peace and stability in the region and to maintain the current status quo between China and Taiwan. The current policy of the United States has been designed to promote an environment that contributes to peaceful relations between Beijing and Taipei. Following the discussion of cross-Strait political developments in Chapter 4, this chapter focuses on the parallel military situation.

The Commission held a hearing on February 6, 2004, that examined *China's Military Modernization and the Cross-Strait Balance*. The Commission heard from senior State and Defense Department officials on current developments in U.S.-China-Taiwan trilateral relations. The Commission also heard from experts on the parameters of U.S. commitments to Taiwan under the TRA and the role of Congress laid out in the TRA, and from analysts of China's military modernization programs and its military-industrial complex.

The Commission also supported two research projects on China's arms buildup: The first was a report on Chinese procurement activities at the Moscow Air Show, with a particular focus on the ongoing China-Russia arms relationship. The second was an analysis of the impact of acquisitions of foreign weapons and technology on the PLA's weapons development and modernization programs. Both reports are available on the Commission's Web site.<sup>1</sup>

### ANALYSIS AND FINDINGS

#### **Military Modernization and Growth of Defense Spending**

In testimony to the Commission, Dr. Evan Medeiros of the RAND Corporation stated that between 1990 and 2002, China's official defense budget allocation for weapons procurement grew from five billion renminbi (\$600 million) to 57.3 billion renminbi (\$6.9 billion). This represents an approximately one thousand percent increase over a twelve-year period, outpacing China's rapid growth in GDP. According to Dr. Medeiros, the share of the budget devoted to weapons procurement also increased, from 16.3 percent in 1990 to 33.8 percent in 2002.<sup>2</sup> See figure 8.1 for a presentation of China's defense spending from 1997 to 2004.<sup>3</sup>

**Figure 8.1 China's Defense Spending, 1997-2004**  
(in billions of yuan)

	<b>Defense Spending</b>	<b>Percentage Increase</b>	<b>Percentage GDP growth</b>	<b>Consumer Price Index (CPI)</b>
1997	80.570	12.7	8.80	2.800
1998	90.990	12.7	7.80	-0.800
1999	104.650	15.1	7.10	-1.300
2000	120.750	12.7	8.00	0.400
2001	144.200	17.7	7.30	0.700
2002	169.440	17.0	8.00	-0.800
2003	185.300	9.6	9.10	0.500
2004	207.000	11.6	9.50	1.100
<b>Total</b>	1102.900			
<b>Averages</b>	137.860	13.6	8.20	

Source: see footnote 3.

Along with the increase in China's weapons budget, there has been an annual increase on average of thirteen percent in China's officially announced defense budget. These increases are significantly larger than China's GDP growth rate and its inflation rate, China's stated reasons for the growth in its defense budgets. According to Ding Jiye, director of the Finance Department of the PLA General Logistics Department, China will increase its spending on defense in 2004 by 21.83 billion renminbi (\$2.64 billion).<sup>4</sup> The Commission agrees with the current Defense Department assessment that the PLA defense budget is grossly underreported and that reliance on official figures excludes much of China's military modernization program. The Commission continues to estimate that China's defense budget is at least two to three times higher than official statements. According to Deputy Assistant Secretary of Defense Richard Lawless, "the officially announced budget in 2004 is more than \$25 billion, but when off-budget funding for foreign weapon system imports is included, we estimate total defense-related expenditures this year between \$50-\$70 billion, ranking China third in defense spending after the U.S. and Russia."<sup>5</sup>

### **China's Ballistic Missile Buildup**

China's continuing ballistic missile buildup and the rapid pace of deployment opposite Taiwan are a serious challenge to Taiwan's security. These missiles increase the range of options Chinese authorities have to threaten and coerce decisions taken in Taipei. The PRC currently has approximately five hundred to five hundred fifty short-range ballistic missiles (SRBMS) deployed that can strike Taiwan, and that number is expected to grow substantially over the next few years.<sup>6</sup> According to Stephen Blank of the U.S. Army War College's Strategic Studies Institute, "These missiles include the modified M11A and M9A that have ranges of six hundred and

five hundred kilometers, respectively, and can strike any area of Taiwan from their bases in Nanjing military region.”<sup>7</sup> According to the Defense Department’s 2003 *Annual Report to the Congress on China’s Military Modernization*, (2003 DoD Report) all of China’s known SRBM assets are believed to be based in the Nanjing Military Region opposite Taiwan.<sup>8</sup> Deputy Assistant Secretary of State Randy Schriver testified before the Commission that the State Department believes “the missile threat and the missile challenge is extremely serious.” Taiwan currently has limited dedicated military assets to guard against such an attack.

China’s increasing ballistic missile inventory may have already in fact altered the status quo in the Taiwan Strait. Deputy Assistant Secretary Lawless noted in his testimony that “the build-up directed so forcefully and frontally against Taiwan, is clearly an attempt to change the dynamic. And by dynamic, I mean to an extent, China’s calculation on what the cost would be to China both in terms of resources and of time that would have to be devoted to coerce or invade Taiwan.”<sup>9</sup> This changing dynamic is an issue requiring review and focus by U.S. policymakers. The necessity of maintaining a U.S. policy of ambiguity concerning Taiwan’s de jure status should not blind us to the de facto shift that is taking place in the military balance.

China sees its missile deployments as a lever to gain influence over Taiwan. It has been reported that then-President Jiang Zemin proposed to President Bush in October 2002 that China could link its deployment of short-range missiles facing Taiwan to U.S. arms sales to Taiwan.<sup>10</sup> This proposal did not result in any public response by the United States. If China chose to ease cross-Strait tensions by redeployment of the missiles, the threat would still remain, as China retains the ability to strike the same set of targets with longer-range ballistic missiles and long-range cruise missiles. While the distances traveled would be longer, the time necessary to accomplish the mission would not be inordinately extended. These missiles are mobile and can be moved with little notice. This would be a less visible but still effective coercive tool against the authorities in Taipei.

### **Weapons Development and Acquisitions: Shifting the Cross-Strait Balance**

China is in the middle of a far-reaching buildup of its naval, air, and ground forces as well as ongoing development of information warfare capabilities and enhanced space-based assets. China is developing a leading-edge military with the objective to intimidate Taiwan and deter U.S. involvement in the Strait.

The military modernization program initiated by Deng Xiaoping in the early 1980s has had a significant effect not only on actual Chinese military capabilities but also on how the United States and its regional allies view their relationship with China. The weapons China is acquiring are an increasing challenge to American technical military superiority in the region. The Chinese strategy of improving its force options versus Taiwan and the ability to deter and counter U.S. military intervention is fast becoming a reality.

According to testimony before the Commission by Dr. David Finkelstein of the CNA Corporation, "Acting upon its own assessments of the rapidly changing nature of warfare and China's changing security environment, Beijing's military leadership came to the conclusion that the armed forces of China were ill-suited to cope with its future defense-related challenges. The scope of reforms the Chinese defense establishment planned to achieve cuts across every conceivable facet of activity within that establishment."<sup>11</sup>

China's strategic acquisition program and the development of strategies and doctrines to meet these challenges continue unabated. On December 17, 2003, *ITAR-TASS* reported that Russian Defense Minister Sergei Ivanov and Chinese Defense Minister Cao Gangchuan signed a follow-on working protocol on bilateral military-technical cooperation for 2004.<sup>12</sup> According to this report, "China is no longer purchasing massive numbers of weapons systems but is pursuing initiatives to obtain licenses and to *co-produce weapons for export*." This is a significant emerging issue, as this level of cooperation with Russia would help China's goal of evolving into a modern weapons-producing nation. According to a Commission-sponsored study by Richard Fisher, the PLA has become the major purchaser of Russian military weapons and technology:

*By 2006, the PLA could have 400 SUKHOI fighters and fighter bombers.<sup>13</sup> These will be armed with thousands of Russian made air-to-air and precision-guided air-to-ground munitions. Current U.S. F-15C, F-16 and Navy F/A-18C/E/F fighters will face an imposing challenge from the growing number of multi-role capable PLAAF SUKHOIS. In terms of maneuverability and close-in fighting, the SUKHOI has an advantage over the U.S. fighters in terms of higher thrust-to-weight ratio and lower wing loading, which give it better maneuverability.<sup>14</sup> Even with U.S. Air Force F-15C fighters based in Okinawa, the PLA's fleet of 300-400 SUKHOI fighters would overwhelm U.S. fighters and their AWACS and tanker support. PLA will have many hundreds of advanced track via missile S-300 SAMs. By 2007, thereabouts, at least 12 KILO submarines, eight of which will be armed with advanced long-range CLUB anti-ship missiles, and this goes on to include naval weapons technologies that's enabling three new classes of stealthy warships.<sup>15</sup>*

Dr. Finkelstein also notes, "The PLA is demonstrating that it is a learning organization. They know what's wrong with the PLA. They're working to make the necessary adjustments. And it's likely going to take many years for the PLA to turn its aspirations into reality."<sup>16</sup> The PLA has begun to integrate these systems into its operational forces and is in the process of rationalizing their use in a cross-Strait encounter.<sup>17</sup> Moreover, China is attempting to develop the capabilities to avoid or counter U.S. involvement in a conflict in the Strait. It has been demonstrated in military exercises that China has incorporated a confrontational training strategy,<sup>18</sup> and most of the training now explicitly identifies the United States as a possible adversary.<sup>19</sup> As the 2000 Defense Department report

on China's military modernization states, "A cross-Strait conflict between China and Taiwan involving the United States has emerged as the dominant scenario guiding PLA force planning, military training, and war preparation."<sup>20</sup>

### ***U.S.-China Increasing Naval Competition***

China's military modernization is focused on exploiting assessed vulnerabilities in Taiwan's national and operational-level systems and on Taiwan's dependence on shipping for its survival. The Commission noted in its 2002 report that the topic of a Chinese blockade of Taiwan would be the most important defense topic in the coming decade.<sup>21</sup> China views the United States as the primary maritime obstacle to its interests in East Asia, especially Taiwan. Enforcing its South China Sea territorial claims—including the Spratly Islands—requires the PRC to possess a navy that can sustain itself away from shore, with air defenses, and air cover.

In the past two years, the PRC Navy has initiated a significant program to build military ships. It has been reported that "construction has begun on some 70 military ships over the last 12 months, including a number of landing craft."<sup>22</sup> According to Dr. Evan Medeiros of the RAND Corporation, "in the last three to four years, one of China's key shipyards has built four new 7,000-ton destroyers based on stealthy design and with improved air defense and anti-submarine capability. The serial production of these modern vessels is a first for China's shipbuilding industry."<sup>23</sup>

The Commission also heard testimony from Professor Lyle Goldstein and Mr. William Murray of the Naval War College that China is making a significant investment in submarine and anti-submarine warfare. Submarines have become a central focus of China's naval and peripheral strategy. It is easier to track a submarine with a submarine, and the numbers and types of submarines China is acquiring could seriously impact U.S. submarine operations in the region. China has focused its resources on the purchase of Russian state-of-the-art naval platforms and associated weapons. In 2002, Russia sold China an unprecedented number of Russian *KILO*-class submarines and the antisubmarine/antisurface shipping *TEST-71* torpedo.<sup>24</sup> Russia continues to provide technical support to China's domestic production of the *SONG*-class submarine. The 2002 Defense Department report indicates that the *KILO*-class submarines provide Beijing with access to previously unavailable quieting and weapons technology. Additionally, the 2002 report stated, "China will continue using Russian technology to improve quieting, propulsion, and submarine design; it also is incorporating foreign technology into its existing submarines. China also will benefit from the maturation of its domestic submarine research and development infrastructure to achieve a capability to design and manufacture modern submarines domestically."<sup>25</sup>

As the 2003 Defense Department report states, "The principal areas where China appears to be making advances in coercive military capabilities involve airpower, missiles, and information operations. Military coercion also can be accomplished through the use of blockades and quarantines."<sup>26</sup> Taiwan is vulnerable to Chinese coercive threats to its seaborne supply lines. The PLA has initiated a program to upgrade its submarine force's systems, weapons,

training, and doctrine. The PLA Navy's near-term focus on diesel submarines, however, is one of several indicators suggesting that Beijing's preferred coercive tool against Taiwan would be a naval blockade.<sup>27</sup> According to the testimony of Professor Goldstein and Mr. Murray, "China is making a very significant investment in undersea warfare and submarines are emerging as the centerpiece of its ongoing naval modernization."<sup>28</sup>

Moreover, according to Mr. Murray, "In May 2002, Russia announced a contract to sell eight of these *KILO* submarines to the People's Republic of China. They're getting eight of these for \$1.6 billion, and depending on the source, they'll either take delivery by 2005 or 2007. These submarines are extremely difficult to find, and they'll be operated in some of the most challenging antisubmarine warfare environments on the face of the earth."<sup>29</sup>

China has a tremendous number of submarines. According to Professor Goldstein and Mr. Murray, "One submarine that is unlocated is going to cause a battle group commander to take a real hard look at what he wants to do and why. And China can easily muster 40 or 50 submarines without much trouble whatsoever. Additionally, China has something we have a hard time getting over there, and that's local knowledge. When they operate in these waters day after day, hour after hour, they acquire a level of expertise on where it's quiet, where it's noisy, where are the fishing vessels and so on and so forth, that we just don't have yet."<sup>30</sup>

### ***Russia-China Military Transfers—Increasing Lethality***

A comparison between Russian arms exports to China in the early 1990s with those more recently authorized shows an alarming increase in lethality and sophistication. Restrictions on the levels and types of technology the Russian government was willing to sell to China have weakened. Russia is selling systems to China that only a few years ago the Russian military establishment was hesitant to even discuss, let alone sell, e.g., the *CLUB-S* antiship cruise missile. And with concern growing over the lifting of the EU arms embargo, the Putin administration may be emboldened to authorize the export of even more sophisticated systems to China to retain its market share. Nikolay Shcherbakov, adviser to the director general of the Altair Naval Scientific Research Institute of Electronic Engineering, is reported as saying that "we are supplying China with new-generation equipment. We have been allowed to supply *MOSKIT* supersonic antiship cruise missiles with twice the range—240km instead of the existing 120."<sup>31</sup> Additionally, collaborative ventures between Russian and Chinese defense firms can be tied directly to qualitative improvements in Chinese weapons.

The cumulative effect of the acquisition of Russian arms provides the foundation the PLA needs to develop new doctrines, strategies, and mission capabilities. In his testimony to the Commission, Mr. Fisher stated that "these new capabilities are increasingly presenting specific challenges to American power in Asia and are propelling what some officials in Taiwan fear will be a crossover in the military balance by 2005 and beyond."<sup>32</sup>

Although the PLA is still reliant on foreign acquisitions, in the last five years China's defense-industrial base is becoming a modern productive base capable of producing the components, systems,

and weapons that China needs. China's industrial firms have improved their R&D techniques, their production processes, and the quality of their output. It is long-term Chinese policy to acquire both weapons systems and an indigenous capability to produce that system. This policy is beginning to have an immediate impact on systems capabilities. According to Dr. Medeiros, China "has been able to serialize the production of destroyers based on stealthy designs with improved air defense and anti-submarine capability. China has also improved its ability to serial produce ballistic missiles with an increase in annual production of short-range ballistic missiles from 50 to 75 percent."<sup>33</sup>

### ***Israel-China Military Transfers***

As the Commission noted in its 2002 report, Israel was second only to Russia as a weapons system provider to China and as a conduit for sophisticated military technology. The Commission continues to be concerned over Israeli transfers of U.S.-origin technology to China.

In January 2003, it was reported in the Israeli press that in response to concerns raised by the United States, the government of Israel had decided to suspend all contacts on the export of arms equipment to China.<sup>34</sup> At that time, Israel apparently gave assurances to the United States that it would not sell any item to China that could harm U.S. security.<sup>35</sup> The United States and Israel subsequently established a framework by which they are able to discuss the issue of Israeli defense assistance to China. According to Amos Yaron, director-general of Israel's defense ministry, "There are things we are able to do and are doing, and there are things that are more problematic, and it is in this framework that we will continue to work with China and with our U.S. friends to clarify matters and avoid misunderstandings."<sup>36</sup>

In late March 2004, Israeli press reports indicated that Mr. Yaron had held talks in Beijing on re-establishing Sino-Israeli defense ties.<sup>37</sup> The specific content of these discussions is not a matter of public knowledge. The Commission understands that Israel has offered training facilities, including one for urban warfare, to train China's security forces for the Olympics. Over the last year, reports indicate that Israeli firms have discussed a range of projects with China, including the export of sensor and observation systems, security fences, microwave and optics, training, metal detectors, and packages for airport and vital facilities security. The press report stated that Israel had also offered the Chinese training in the use of unmanned air vehicles to monitor facilities.<sup>38</sup> According to a December 15, 2003, *Defense News* story, "Israel's MOD (Ministry of Defense) recently granted more than a dozen licenses for Israeli firms to market specific products and services in China, industry officials here said. Israeli-developed systems proposed for sale to China's People's Liberation Army include the Tavor personal assault weapon, pilot training systems, advanced communication and surveillance gear, and a range of unmanned aerial vehicles."<sup>39</sup>

The Defense Department reports that Israel has sold a number of *HARPY* unmanned aerial vehicles (UAV) to China.<sup>40</sup> The PLA has apparently integrated the *HARPY* into its operational forces,

since they appeared in PLA exercises during 2002. The *HARPY* is designed to detect, attack, and destroy radar emitters. These systems pose a significant threat to various critical military C4ISR facilities on Taiwan as well as to U.S. operational forces operating in the region. The UAV has a range of about five hundred kilometers and contains a high-explosive warhead.<sup>41</sup>

### **Finding the “Silver Bullet”**

Contemporary Chinese military analysis tends to use the term “assassin’s mace” or “trump card” to cover a broad spectrum of Chinese military programs that more rightly should be assessed as conventional, rather than asymmetrical, operations. In his monograph *Rethinking Asymmetric Threats*, Dr. Stephen J. Blank writes, “We need to understand that it is not so much threats that are asymmetrical. Rather, it would perhaps be more precise and possibly even more instructive to use the term asymmetric with respect to strategies and enemies.”<sup>42</sup> According to Mr. Jason E. Bruzdinski of the Mitre Corporation, “Traditional emphasis on superior strategy and tactics is an important characteristic of China’s strategic culture. This emphasis profoundly influences Chinese military thinking today, despite the recent focus placed on introducing advanced military hardware into the PLA. Specifically, *shashoujian* [assassin’s mace] blends traditional Chinese war fighting strategies with modern systems, platforms, and weapons that benefit from technology of the information age.”<sup>43</sup>

### **China-Taiwan Information Warfare**

Current PLA discourse promotes information warfare as an effective weapon to subdue Taiwan and deter possible U.S. intervention. According to University of Richmond Professor Vincent Wei-cheng Wang, “The attainment of long-range precision interception weapons, the use of unused frequencies in civilian TV and radio broadcasting for information communication, encryption-based codes to prevent information stealing, space and satellites to obtain intelligence, use of saturated tactical ballistic missiles, and the development of a directional infrared jamming system all are among Chinese possibilities.”<sup>44</sup> In the Taiwan Strait, the PLA seeks to gain information dominance in a conflict with Taiwan by attacking Taiwan’s command and control centers and information networks and by conducting propaganda and political warfare. The purpose is to coerce Taiwan by subduing the enemy without actually fighting.<sup>45</sup> According to the 2003 Defense Department report, “There is an emphasis on conducting operations that will paralyze the high-tech enemy’s ability to conduct its campaign, including operations to disrupt and delay the enemy’s capabilities at its inception . . . Degrading a high-tech adversary’s ability to process or gather information is viewed as an absolutely essential task if the weak is to defeat the strong, especially if that high-tech adversary is perceived to be overly dependent upon information systems to enable its own operations.”<sup>46</sup>

Recognizing the possible involvement of the U.S. military, the current scholarship on China’s R&D finds that PRC strategists believe that a superior navy could be defeated through the disabling of its space-based systems, as for example, by exo-atmospheric det-

onation of a nuclear warhead to generate an electromagnetic pulse, or advanced weapons systems such as tactical laser weapons. In addition to attacks against U.S. military systems, infrastructure, and forces, targets of an asymmetric attack include the domestic U.S. and Taiwan militarily critical infrastructures such as telecommunications networks, electrical power grids, civilian aviation systems, transportation networks, seaports and shipping, highways, and television broadcast systems.<sup>47</sup> It has recently been reported that China has successfully developed a laser cannon with a range of more than one hundred kilometers and might have already deployed it in Fujian Province facing Taiwan.<sup>48</sup> This era of Chinese military strategy, which focuses on the search for “silver bullet” weaponry to defeat a stronger opponent, viewed from a politico-military standpoint, signifies that the complex cross-Strait relationship is entering a new and, arguably, unstable era.<sup>49</sup>

### **Potential Lifting of the EU Arms Embargo**

French President Chirac<sup>50</sup> and German Chancellor Schroeder<sup>51</sup> are on record stating they believe the current EU arms ban against China imposed in 1989 as a Tiananmen-related sanction<sup>52</sup> is outdated and should be removed. While not actually binding, the policy did hold each country to prior discussion before the export of weapons to China.<sup>53</sup>

An EU working group has been formed to look into the matter and report back to the European Commission. EU Foreign Policy Chief Javier Solana has signaled support for lifting the ban.<sup>54</sup> Access to more advanced systems and integrating technologies from Europe would have a much more dramatic impact on overall Chinese capabilities today than say five or ten years ago. For fourteen years, China has been unable to acquire systems from the West. Analysts believe a resumption of EU arms sales to China would dramatically enhance China’s military capability. If the EU arms embargo against China is lifted, the U.S. military could be placed in a situation where it is defending itself against arms sold to the PLA by North American Treaty Organization (NATO) allies. As John Tkacik of the Heritage Foundation writes, “EU members need to ask two questions: Which country is the most likely adversary against which China would employ advanced European military systems, and have the conditions that justified imposing the EU ban changed significantly.”<sup>55</sup> Additionally, this action could presumably affect the ability of the United States and NATO countries to cooperate in defense ventures. If European firms are permitted to sell arms to China, it should certainly impact decisions on any cooperative ventures between U.S. and European defense firms.

### **U.S. Policy and the Taiwan Relations Act**

The central pillars of U.S. policy toward Taiwan are the TRA, the three communiqués, and President Reagan’s Six Assurances. The TRA provides a solid legal framework for the bilateral relationship and plays an important role in both Taiwan’s security and its domestic political developments. The historical origins of the act go back to January 29, 1979, when the Carter administration sent a bill to Congress providing for the conduct of unofficial U.S.-Taiwan relations in the post-Beijing recognition period. The original bill

contained a basic economic, cultural, and functional framework but did not provide for security guarantees or arms sales.<sup>56</sup> On March 29, 1979, Congress passed HR 2479; President Carter signed the bill (P.L. 96-8) into law on April 10. The main effect of the law guaranteed that U.S.-Taiwan relations would not be disrupted by the lack of diplomatic recognition. section 4 (a) of the TRA states:

*The absence of diplomatic relations or recognition shall not affect the application of the laws of the United States with respect to Taiwan, and the laws of the United States shall apply with respect to Taiwan in the manner that the laws of the United States applied with respect to Taiwan prior to January 1, 1979.*

At the time of recognition of the PRC, President Carter also terminated the twenty-five year-old U.S.-Taiwan mutual defense treaty. As a result, the TRA provided the legislative authority for continued arms sales and a statement concerning U.S. support for Taiwan's defense needs.

Key elements of the TRA include the following:

*P.L. 96-8, section 3301 (2)(b)(4): It is the policy of the United States . . . to consider any effort to determine the future of Taiwan by other than peaceful means . . . a threat to the peace and security of the Western Pacific area and of grave concern to the United States.*

P.L. 96-8, section 3302:

*(a) Defense articles and services. In furtherance of the policy set forth in section 3301 of this title, the United States will make available to Taiwan such defense articles and defense services in such quantity as may be necessary to enable Taiwan to maintain a sufficient self-defense capability.*

*(b) Determination of Taiwan's defense needs. The President and the Congress shall determine the nature and quantity of such defense articles and services based solely upon their judgment of the needs of Taiwan, in accordance with procedures established by law. Such determination of Taiwan's defense needs shall include review by United States military authorities in connection with recommendations to the President and the Congress.*

*(c) United States response to threats to Taiwan or dangers to United States interests. The President is directed to inform the Congress promptly of any threat to the security or the social or economic system of the people on Taiwan and any danger to the interests of the United States arising therefrom. The President and the Congress shall determine, in accordance with constitutional processes, appropriate action by the United States in response to any such danger.*

In his testimony to the Commission, Deputy Assistant Secretary Lawless said, "The United States takes its obligations to assist Taiwan in maintaining a self-defense capability very seriously. The United States actively monitors the security situation in the Taiwan Strait. We make available articles and services to Taiwan to

ensure that it can maintain a sufficient self-defense capability. We work with Taiwan on a series of non-hardware-related initiatives to address perceived shortcomings in Taiwan's readiness, and we maintain capabilities to assist in the defense of Taiwan if so required. The preservation of Taiwan's democracy depends on effectively balancing these two goals while providing Taiwan with the support it needs to deter PRC coercion."<sup>57</sup>

### ***TRA and the Congress***

Through the TRA, Congress granted itself a joint role in Taiwan policy—it became a partner with the executive branch in assessing Taiwan's defense needs and in deciding how to respond to threats in the region.<sup>58</sup> Therefore, the TRA imputes shared decision-making by Congress. Unfortunately, the executive branch has not sufficiently coordinated its cross-Strait policies and actions with Congress in a manner allowing Congress to fully exercise its important role. For example, Congress has historically been notified only after the executive branch has in effect made a decision on the sale of specific weapons to Taiwan or after it had taken some Taiwan specific action.

The Taiwan Strait crisis of 1995–96 exemplifies the consequences of a lack of a robust congressional-executive coordination on cross-Strait policy. China conducted a series of missile firings within a few kilometers of Taiwan's major ports, Keelung and Kaohsiung. In response, President Clinton ordered two aircraft carrier task forces to divert to the waters near Taiwan.<sup>59</sup> Congress then requested that the president report to Congress on Taiwan's security pursuant to his obligations under the Taiwan Relations Act. President Clinton replied that because the purpose of the Chinese exercises was to "send a political message to Taiwan and the United States, and not to prepare for imminent military action against Taiwan," he was not required to report to Congress.<sup>60</sup> Unfortunately, it took military action by China to get the kind of focus on the regional balance that should be routine. Other events, such as the PLA's 2001 Dongshan exercise aimed at Taiwan, and Taiwan's 2004 referendum, should each have resulted in consultation with Congress.

In-depth consultations and systematic congressional-executive coordination on Taiwan as envisioned by the TRA and as envisioned by P.L. 107–228 on semiannual consultations are going to be critical for effectively managing this area of U.S. foreign policy going forward. The legislation ensures this responsibility:

*P.L. 107–228, section 1263. CONSULTATION WITH CONGRESS WITH REGARD TO TAIWAN. Beginning 180 days after the date of enactment of this Act, and every 180 days thereafter, the President shall provide detailed briefings to and consult with the appropriate Congressional committees regarding the United States security assistance to Taiwan, including the provision of defense articles and defense services.*

Additionally, the Foreign Relations Authorization Act of 2003 requires Taiwan to be treated as a non-NATO ally with respect to sales of U.S. defense articles and services.

### **Taiwan Defense Developments**

While China's rapid economic growth has fed the rise in its military expenditures, Taiwan's economic situation appears to be hampering its continuing military modernization. As Taiwan's economic growth has slowed, this has led to constraints on the defense budget. The defense share of the national budget has fallen from 22.8 percent in 1996 to 14.7 percent in 2001. After personnel and administrative costs, there was little left over to acquire new military hardware.<sup>61</sup> The 2004 fiscal year defense budget has a three percent increase, to US\$ 8.03 billion (NT [New Taiwan]\$ 265 billion) up from US\$ 7.8 billion (NT\$ 257 billion) in 2003. The new budget includes a more than thirty percent increase in military investment. Strong concerns have been raised in the United States, however, about Taiwan's budgetary and political commitment to purchasing adequate defense resources.

Taiwan's 2002 defense ministry white paper envisioned a three-pronged defense strategy to combat threats from China's military satellites, ballistic missiles technology, and information warfare.<sup>62</sup> Taiwan's most significant vulnerability is its limited capacity to defend against the growing arsenal of Chinese ballistic missiles.<sup>63</sup>

Taiwan's key defense weaknesses include a lack of a strong anti-submarine warfare force, a limited mine-laying and mine-sweeping capability, problems with the island's air defense, problems regarding integration of its various defense assets, a limited ability to conduct coordinated joint warfare (or defense), and a dependence on the United States to provide it with real-time targeting information.<sup>64</sup> The political situation among Taiwan's army, air force, and navy is characterized by considerable tension. While it is apparent both to those within and without Taiwan that Taiwan's air defense and naval operations are increasingly important to the island's security, the army believes that air and sea superiority cannot be held for long. It is the army's view that it is therefore necessary to plan for a land battle on the island's western shores. The army has fought to have a major say in defense planning and budgetary allocation.<sup>65</sup>

According to news reports, the China Affairs Department of the Democratic Progressive Party published a report on China's basic military capabilities in which it said that Beijing had developed a "sudden strike" strategy to attack Taiwan. This story discussed a scenario in which an attack would consist of an initial seven-minute shock and strike missile barrage that would paralyze Taiwan's command system, followed by seventeen minutes in which Taiwan's air space will be invaded by fighter jets. Within twenty-four hours of the strike, 258,000 Chinese troops could be deployed in Taiwan. China's fast-growing military modernization and expansion is aimed at a possible war between 2005 and 2010, according to the report.<sup>66</sup>

### ***Taiwan Defense Budget and Weapons Programs***

Taiwan's Defense Minister Tang Yiau-ming has stated that Taiwan's military is committed to pursuing a high-tech defense modernization program.<sup>67</sup> The top priority systems include building the announced early warning long-range radar system and the construction of the Po-Sheng [Broad Victory] C4ISR project. The mili-

tary is also interested in purchasing three PAC-3 systems, upgrading its PAC-2 systems, pursuing eight diesel submarines, and acquiring twelve P-3 Orion antisubmarine reconnaissance aircraft.<sup>68</sup>

The total Taiwan budget is NT\$1.352 trillion, or US\$37.15 billion, with the defense portion taking 14.7 percent of the overall budget.<sup>69</sup> In addition, the government has submitted a request for NT\$50.3 billion (\$1.52 billion) for the acquisition of classified defense systems, with NT\$30.2 billion to be used for weapons.<sup>70</sup>

The 2004 budget includes funding for the “Po-Sheng Project” and the long-range early warning radar system. Work on the Po-Sheng Project, which will coordinate all military functions—including command, control communications, computers, intelligence, surveillance, and reconnaissance has begun. The lead contractor is Lockheed Martin, and the contract could eventually be worth approximately \$2.15 billion.<sup>71</sup> In September 2003, Lockheed Martin MS2 Tactical Systems was awarded an initial \$27.5 million contract to begin working on the integrated system for Taiwan. The project is expected to be completed by June 2004. Under the contract, Lockheed Martin will provide the C4ISR and Link-16<sup>72</sup> combat radio capabilities across Taiwan’s armed forces. Taiwan will buy this system in increments, as funding is made available over the next few years.<sup>1</sup>

In March 2004, the U.S. Defense Security Cooperation Agency notified Congress about the probable sale to Taiwan of two ultra-high-frequency long-range early warning radars as well as associated equipment and services. The total value could reach as much as NT\$58.55 billion, or \$1.8 billion. These radars would be part of Taiwan’s surveillance radar program.<sup>73</sup> The full package would also include missile warning centers, facilities to house and maintain the radar, and training programs. These systems would enable Taiwan to detect Chinese missile launches earlier, providing more warning time.<sup>74</sup> President Clinton approved the sale of the long-range radar in April 2000,<sup>75</sup> and in November 2003 the defense committee of Taiwan’s Legislative Yuan finally approved the acquisition. The long delay in final approval was the result of negotiations between the government and the Legislative Yuan.

Additionally, the Ministry of National Defense (MND) has formally presented a letter of request to acquire three PAC-3 units and upgrade three PAC-2 units to PAC-3 standards. Minister of Defense Tang Yiao-ming stressed that the PAC-3 procurement would be finalized in the 2005 budget,<sup>76</sup> with an estimated cost of NT\$110 billion (\$3.3 billion). It has been reported that the MND will request a special budget for the purchase, because the annual defense budget will be insufficient.<sup>77</sup> The MND hopes to finalize the submarine purchase plan by mid-2004. The only contract fully underway is the NT\$28 billion (\$844 million) contract for the KIDD-class destroyers.<sup>78</sup> The MND is also working on a low-altitude antitactical ballistic missile that, according to MND Administrative Deputy Minister Lee Hai-tung, will be completed within ten years.<sup>79</sup>

<sup>1</sup>Jason Sherman, “Taiwan To build Military-Wide C4ISR Network,” *Defence Tech*, October 11, 2003 DefenceTalk.com.

The MND has proposed spending NT\$605.2 billion (US\$ 17.9 billion) on arms procurement over the next five years. This proposal allots the air force 24.55 percent, the navy 23.76 percent, and the army 18.92 percent.<sup>80</sup> In terms of arms procurement, twenty-eight percent of the budget will be spent on information and electronic warfare equipment.

### RECOMMENDATIONS

- The annual report to Congress recommended in Chapter 4 on Taiwan's requests for military equipment and technology should include an assessment of the new military systems required by Taiwan to defend against advanced PRC offensive capabilities.
- As recommended in Chapter 4, Congress and the administration should review the need for a direct communications hotline between the United States and Taiwan for dealing with crisis situations. This is important in light of the short time frame of potential military scenarios in the Strait, together with Chinese strategic doctrine emphasizing surprise and deception.
- The Commission recommends that Congress urge the president and the secretaries of State and Defense to press strongly their European Union counterparts to maintain the EU arms embargo on China.
- The Commission recommends that Congress direct the administration to restrict foreign defense contractors who sell sensitive military-use technology or weapons systems to China from participating in U.S. defense-related cooperative research, development, and production programs. This restriction can be targeted to cover only those technology areas involved in the transfer to China.
- The Commission recommends that Congress request the Department of Defense to provide a comprehensive annual report to the appropriate committees of Congress on the nature and scope of foreign military sales to China, particularly from Russia and Israel.

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## CHAPTER 9

### MEDIA AND INFORMATION CONTROL IN CHINA

*“**MEDIA CONTROL.** The Commission shall evaluate Chinese government efforts to influence and control perceptions of the United States and its policies through the internet, the Chinese print and electronic media, and Chinese internal propaganda.”* [P.L. 108–7, Division P, Sec. 2(c)(2)(I)]

#### KEY FINDINGS

- China’s economic reforms have not led to fundamental changes in its policy of controlling the free flow of information. China has successfully established systems of information control, which are both deep and widespread. The Chinese government’s crackdown on individuals who publish unacceptable content or violate information control rules is unevenly exercised, but nonetheless is part of a deliberate effort to establish comprehensive control. Selective but harsh enforcement has led to widespread self-censorship.
- The Internet is a growing focus of China’s information control efforts; many individuals in China and in the United States believe that it will lead to greater openness and the freer flow of information. However, the Chinese government is actively trying to control the Internet with a mixture of old tactics, such as high-profile punishment for vaguely defined crimes, and newer methods, such as establishing firewalls and tracing users.
- The Chinese government shapes popular perceptions of the United States and its policies through direct control over government-owned media outlets and by selectively censoring, and inducing self-censorship by, nongovernment media. This control has been used to create a consistent message in the Chinese media that is particularly critical of U.S. foreign policy and intentions in Asia. Through this propaganda and censorship, the government enhances the risks of misperception and miscalculation in the bilateral relationship and increases the potential for, and the difficulty of, managing crisis situations.
- The Severe Acute Respiratory Syndrome (SARS) crisis demonstrated both the extent of China’s efforts to control the free flow of information and the limits of this exercise, given the Chinese population’s growing access to the Internet and other new forms of information distribution.
- SARS also demonstrated that China’s information control policies can have a direct effect on other countries. The failure of China to release complete and credible information about the health crisis hindered international efforts to combat the disease.

## OVERVIEW

The Chinese government maintains significant controls on traditional information channels and is enhancing its resources to establish authority over new media. As a result, the government continues to possess a disconcerting capacity to influence the opinions and perceptions of its citizens.

The Commission's 2002 Report to Congress focused on the depiction of the United States and its policies in Chinese media and Chinese government statements.<sup>1</sup> The work of the Commission during this reporting cycle explored the capacity of the Chinese government to control the information available to its citizens. We evaluated the success of China's information control efforts and therefore China's ability to influence and control perceptions of the United States, examined whether China's policies in this regard have intensified or relaxed over the past year, and assessed the actions that the United States can pursue to reduce the effectiveness of China's information control policies.

The Commission held a hearing on June 5, 2003, to examine Chinese government efforts to control information flows and the media, particularly in the context of the SARS crisis, and to assess U.S. government and private sector efforts to bring reliable news to the Chinese public and to overcome government censorship. The hearing featured witnesses from the U.S. International Broadcasting Bureau, Voice of America (VOA), and Radio Free Asia (RFA) and outside experts on China's media control efforts, with a focus on those directed toward the Internet. The Commission also continued its work in translating articles from influential publications within China discussing Beijing's economic and security strategies and perceptions of the United States, which are published on our Web site.

The Commission's 2002 Report to Congress summarized the findings of a Commission-sponsored study of how China's official news media portrays the United States and its policies. The Commission's continuing work in translating important Chinese publications has reinforced the study's findings that the Chinese population is exposed to a uniform and consistent message that is critical of U.S. foreign policies and intentions in Asia.

## ANALYSIS AND FINDINGS

### **China's Media Control Efforts**

The Chinese government actively seeks to control the information to which its citizens have access. The past year witnessed both bright and dark spots for the scope of media freedom. The SARS crisis demonstrated both the extensive efforts China's authorities undertake to control news of topics deemed sensitive as well as the limits of such censorship, given the Chinese population's growing access to the Internet and other new forms of media. Though Reporters Without Borders' 2003 report notes that some topics formerly prohibited from discussion in the Chinese media are now allowed, foreign and domestic journalists continue to confront government obstacles to reporting on a variety of subjects.<sup>2</sup> Moreover, because China allows hotels primarily used by foreign guests to

maintain access to foreign news sources, foreign visitors to China are unlikely to realize the extent of government censorship.

Chinese citizens who are unable to give voice to their concerns have resorted to desperate acts. For example, in March 2003, Fang Qinghui used a fake bomb to hold a local Reuters office hostage in order to have a public outlet for his concerns with corruption and unemployment.<sup>3</sup>

In one recent example of information control, Vice President Richard B. Cheney's April 2004 speech in Shanghai, broadcast live on Chinese television, was revised to remove mentions of political freedom and Taiwan when the Chinese government released a transcript.<sup>4</sup> China's information control stretches beyond news to include art and history as well. For instance, Senator Hillary Rodham Clinton's published memoir was selectively edited to remove portions speaking of human rights violations in China.<sup>5</sup> Moreover, China's WTO accession agreement stipulates that China will allow only twenty foreign films per year to enter the market. Through the China Film Group, the Chinese government controls which films are selected for importation. The government can therefore choose which cinematic content it allows into the country.

The media control strategy of the Chinese government relies on making examples of a select few journalists or publications, which receive harsh punishments for vaguely defined crimes. As a result, remaining media outlets generally engage in self-censorship. Because the line between acceptable and unacceptable news is never well defined, those wishing to stay on the safe side seek to avoid any story that seems even questionable.<sup>6</sup>

The public's access to information can often play a role in public health issues. China adopted a new AIDS prevention strategy in December 2003, which contains efforts to increase public awareness and knowledge but notably does not include any broader intention to ease state controls on information. In light of this, the Commission recommended that Congress urge China to incorporate into its new AIDS strategy provisions for moving toward a free press and unobstructed public access to the Internet.<sup>7</sup> China's recent history is not promising in this regard. China arrested prominent AIDS activist Wan Yanhai in September 2002 for posting AIDS-related information on the Internet. He was detained for more than a year, until the government had extracted a confession to the charge of exposing state secrets. Wan's organization remains banned.<sup>8</sup>

In fact, China continues to jail Internet activists for a variety of causes. As just a few examples, Du Daobin was imprisoned for months before being charged in February 2004 with "inciting subversion" by posting calls for democracy online.<sup>9</sup> Four students were each given eight to ten years in prison in May 2003 for "subverting state secrets" by posting political essays on the Internet.<sup>10</sup> Zhang Shengqi was arrested in November 2003 for posting reports of government repression of members of the Catholic Church. He was tried in secret in March 2004 for "divulging state secrets," along with Xu Yonghai and Liu Fenggang, who helped with the reports.<sup>11</sup>

### **Expanding Media: The Internet and Mobile Phones**

The government's treatment of traditional media in China has not fundamentally changed in recent years. The same methods are

used, and the news media respond in the same manner—at times challenging and at times acquiescing. A growing factor in the flow of information is the Internet, with Chinese users expanding rapidly. China's Internet users jumped from thirty-four million to fifty-nine million over the course of 2002, and at the close of 2003 the number was reportedly nearing eighty million.<sup>12</sup>

Because of the difficulty in controlling the Internet, Chinese users are able to access “a much broader range of news and opinion than they get from traditional media.”<sup>13</sup> Nonetheless, the Chinese government attempts to exert control over the Internet and its usage by employing both old and new tactics. As with traditional media, select individuals are punished as a warning to others.

At the same time, the government is working to develop a more systematic control over the Internet and has developed extensive human and technological resources for monitoring and censoring content on the Internet.<sup>14</sup> The Chinese government is expanding its capability to trace Internet activity back to identifiable individual users. Additionally, while the opaque nature of China's security forces precludes an exact accounting, it has been estimated that China's Ministry of Public Security maintains a force of thirty thousand people solely tasked with tracking down Internet dissidents as part of the “Golden Shield” project.<sup>15</sup>

The government uses filtering and blocking technology to deny users inside China access to selective Web sites such as those of foreign news, human rights groups, and anything else deemed objectionable. In the past two years, this technology and the methods in which it is employed have grown more sophisticated<sup>16</sup> and in some cases have involved technology developed by U.S. firms.<sup>17</sup> China's censors sometimes attempt to block a Web site temporarily and sometimes attempt to maintain the block permanently. Individuals inside and outside of China are often able to circumvent the firewall that impedes access to such sites, if they take proactive measures and possess a basic competency in operating computer systems. The technologies employed by both sides result in a cat-and-mouse game where no firewall or circumvention is permanent, but Internet users who do not attempt to circumvent the firewall find their access to information further constricted after each iteration.

Cell phones are another rapidly expanding medium for the flow of information. China has more cell phones in use than the United States, with 277,000,000 in January 2004.<sup>18</sup> Increasingly, cell phones are equipped with the capacity to send short text messages to a distribution list of other cell phones. The text messaging function of cell phones is used extensively in China, and thus represents a rapidly expanding method of interpersonal communication. Chinese cell phone users sent 15.6 billion text messages in January 2004 alone, an average of nearly two per day by each cell phone user.<sup>19</sup> During the SARS epidemic, these text messages became an important and often uncensored source of information. However, the Chinese government is technically capable of monitoring such messages.<sup>20</sup> The development of the Chinese government's monitoring of text messages is an area deserving greater U.S. attention.

### **U.S. Anticensorship Efforts**

With Radio Free Asia and Voice of America broadcasts, the United States has programs in place to provide alternative news and information to some areas of China. U.S. government Web sites, including RFA and VOA, also attempt to provide news to interested Chinese citizens. However, the Chinese government “regularly jam[s] all of the Voice of America and Radio Free Asia radio programs, in clear violation of accepted international rules and regulations followed by almost all other nations.”<sup>21</sup> To jam radio broadcasts, China broadcasts its own transmissions on the same frequencies. Jamming is not always successful, depending on the location of the listener, the respective strength of the competing signals, and the number of frequencies on which RFA and VOA simultaneously broadcast the same signal. Despite the Chinese government’s extensive jamming efforts, RFA and VOA signals still reach a portion of their intended audience.

China also frequently denies visas to journalists of U.S. government-sponsored news organizations, despite the ease with which journalists of Chinese state publications are able to obtain U.S. visas. China maintains more than forty government journalists in the United States, while the VOA has two in China, and the RFA none.<sup>22</sup>

The addition of the Internet to traditional media of information has reconfigured what was a fairly stable system of information repression by the Chinese government. U.S. government Web sites and some private firms are continually seeking to develop methods to circumvent China’s extensive Internet censorship. The Broadcasting Board of Governors (BBG) has a division devoted to anticensorship programs.<sup>23</sup> Private companies in the United States are also working on methods for allowing Internet users in China unfettered access to the Internet and are confident in their systems’ success. Some of these companies claim to already have the “anticensorship technology to do that, and ... just need additional funding.”<sup>24</sup>

### **Support for Internet Anticensorship**

For several years, the Global Internet Freedom Act has been under consideration by Congress. The House version of this bill was incorporated into the Foreign Relations Authorization Act as passed in 2003, but this legislation was not included in the version passed by the Senate. The bill would establish an Office of Global Internet Freedom tasked with combating Internet censorship worldwide, including through the development of anticensorship technologies. The office would also report annually to Congress on the status of foreign government control of the Internet. The Commission believes that such a coordinated effort by the U.S. government is needed to combat this practice in China and elsewhere.

In June 2003, the Commission recommended to Congress that it provide the BBG with funding targeted for China Internet anticensorship programs. The 2004 Omnibus Appropriations Act allocated \$1 million for the BBG to administer a pilot program for this effort. The resulting program cooperates with private sector actors to disrupt China’s blocking and tracking activities, allowing Chinese Internet users unrestricted Web access.

## **The Lessons of SARS**

### ***Background—The Nexus Between Public Health and Freedom of Information***

SARS was officially acknowledged by China in February 2003, though cases are believed to have appeared in southern China in late 2002. The World Health Organization (WHO) classified more than eight thousand cases of the illness through July 31, 2003, with almost eight hundred deaths; the majority of the cases occurred in China.<sup>25</sup> The Chinese government initially reacted to SARS by suppressing all information regarding the epidemic. The outbreak provided an unusual opportunity to gain insight into China's information control goals and methods.

The Chinese government thoroughly suppressed coverage of the initial outbreak of SARS, closing publications such as *The 21st Century World Herald* and *China Newsweek* for releasing information on the outbreak. Also in late 2002, the government noticeably increased control over the topics and perspectives reported by news outlets during the transition period in the country's leadership. The government was compelled to dramatically reverse its policies on censoring information about SARS in April 2003 once facts about the true extent of the epidemic began spreading via the Internet and cell phone text messaging, despite the government's censorship efforts. Even after the April policy shift, however, individual reporters remained under a nebulous threat of jail time or job loss for covering disapproved subjects, and several of their colleagues continue to languish in prison for such offenses.

Were a similar health crisis to recur in China, the government may be less successful in initially containing the information. Under World Health Assembly mandates existing during SARS, China was not technically required to report the SARS outbreak to the WHO. Reporting is only mandatory in the case of a small number of named infectious diseases. The PRC Ministry of Health did send reports to WHO on February 11 regarding an outbreak of atypical pneumonia (as SARS is known in China) in Guangdong. Still, China's often inconsistent and reluctant response to WHO concerns certainly influenced the World Health Assembly's May 28 decision to adopt a resolution confirming WHO's authority to determine the severity of disease outbreaks through on-the-spot investigations, with or without the invitation of the host country.<sup>26</sup>

### ***Information Control During the SARS Crisis***

One common view of China's information flows during the early stage of the SARS crisis is that "China's control of information was absolute."<sup>27</sup> News did eventually trickle out to international media, however, which led to international pressure on China to provide an open account of the outbreak. Additionally, cell phone text messages and more traditional forms of communication spread news and rumors, while international radio broadcasts and Web sites supplied information to those capable of access. It is more accurate, then, to say that the Chinese government attempted to control all information media during the early stages of the SARS crisis and met with substantial but neither complete nor enduring success.

The reversal of policy in managing the SARS crisis by President Hu Jintao and Premier Wen Jiabao began in April 2003, suggesting to many observers that SARS would be an early and decisive test for these two new political leaders. Hu and Wen acted in the wake of international news stories reporting the accusations of a doctor from a Beijing military hospital that the minister of Health and the Beijing City government had wildly understated the number of SARS patients in the capital. Shortly afterwards, the Chinese government's policy responses to the SARS epidemic were in many ways reversed.

Hu and Wen led the nine-member Communist Party Politburo Standing Committee to approve the April 20 dismissal of Health Minister Zhang Wenkang and Beijing Mayor Meng Xuenong and encouraged quieter dismissals of dozens of local officials in affected provinces. They placed Vice Premier Wu Yi in charge of the Health ministry and the national fight against SARS. They extracted a rare public apology for the SARS cover-up from the Beijing party secretary, Liu Qi, who was allowed to remain in office, and ordered public health officials to cooperate with WHO investigators and fully report SARS cases within government channels.

#### ***Implications for Future Behavior of China's Government***

SARS has now subsided, and the remaining question is whether the Chinese government has fundamentally changed its perspective on matters of information control, particularly regarding public health issues, or if it was merely forced into greater transparency by unusual circumstances and international concern. The Commission heard from U.S. officials and others who study China's censorship efforts who believe that the post-April openness of China's government was an aberration and that China would react to any new situation with a similar blocking of domestic reporting.<sup>28</sup>

Those more attuned to China's ongoing economic reforms believe that the Chinese government has realized that its interest lies in protecting public health and avoiding any disruptions in international business flows. Because they see that the Communist Party's legitimacy is no longer based on ideological support but on economic growth, such observers expect that SARS has produced a fundamental change in China's information control strategy.<sup>29</sup>

Given China's formal acceptance of open reporting on purely business issues in the late 1990s,<sup>30</sup> one other possibility is that China will loosen restraints on media reports covering public health issues without changing its broader stance on media control. In practice, China has returned to aggressive information control practices in the months following the SARS crisis, arresting Internet users with pronounced religious or political views.

Because China continues to selectively censor news and other information, it is capable of shaping the perceptions of its populace, particularly regarding the United States and its policies. This represents a subtle but pernicious form of propaganda. As compared to overt government statements, selective censorship leaves Chinese citizens with the belief that their opinions of the United States were independently and reasonably formed, making such misperceptions more difficult to correct.

### ***The Effects of International Pressure***

An important matter for U.S. policy is whether China's loosening of information control relating to SARS was a result of domestic or international pressures. Some witnesses at the Commission's hearing attributed the change to a policy of openness to outside economic and diplomatic pressures. For instance, Dr. Maochun Yu spoke of the Chinese government in saying that "unless you have a very strong external pressure on it, the government cannot itself reform."<sup>31</sup> Others, however, argued that internal pressures are also very important as a result of the unwavering priority that the Chinese government gives to domestic political and social stability. The consensus held that U.S. and international pressure are able to impact significantly the information control behavior of China's government.

The SARS experience also has implications for international news outlets in China. Many Chinese turned to American government news sources such as the RFA or VOA for reliable information during the crisis, despite the efforts of the Chinese government to jam transmissions and block Web sites.<sup>32</sup> Previously, the average Chinese citizen was likely to believe that international media are disreputable and generally given to unfair treatment of China. Because of the events surrounding SARS, many of these same individuals now see international news as more credible, becoming both avid consumers of its news on SARS and more willing sources of information for international journalists in China.<sup>33</sup>

### **RECOMMENDATIONS**

- On June 30, 2003, the Commission recommended that Congress direct the Broadcasting Board of Governors to target funds for efforts aimed at circumventing China's Internet firewall through the development of anticensorship technologies and methods. Congress approved such funding as part of the 2004 Omnibus Appropriations Act. The Commission recommends that Congress continue this program with enhanced resources, pending successful results for the current fiscal year.
- As recommended in the Commission's 2002 Report, the Commission reiterates that Congress should direct the Department of Commerce and other relevant agencies to conduct a review of export administration regulations to determine whether specific measures should be put in place to restrict the export of U.S. equipment, software, and technologies that permit the Chinese government to surveil its own people or censor free speech.
- The Commission recommends that Congress approve legislation to establish an Office of Global Internet Freedom within the executive branch, tasked with implementing a comprehensive global strategy to combat state-sponsored blocking of the Internet and persecution of users. The strategy should include the development of anticensorship technologies.
- The Commission recommends that Congress encourage the administration to press China to freely admit U.S. government-sponsored journalists, such as those representing the Voice of America and Radio Free Asia. China frequently denies visas for such journalists, despite the fact that China's state-sponsored journalists are freely admitted in the United States. Options

should be considered for linking Chinese cooperation to concrete consequences, including the possible use of U.S. visas for Chinese government journalists as leverage to gain admission of more U.S. government-supported journalists to China.

#### ENDNOTES

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13. U.S.-China Economic and Security Review Commission, *Hearing on SARS in China: Implications for Information Control, Internet Censorship, and the Economy*, testimony of Qiang Xiao, June 5, 2003, p. 64.

14. U.S.-China Economic and Security Review Commission, *Hearing on SARS in China: Implications for Information Control, Internet Censorship, and the Economy*, testimony of Ken Berman, June 5, 2003, pp. 51-2.

15. U.S.-China Economic and Security Review Commission, *Hearing on SARS in China: Implications for Information Control, Internet Censorship, and the Economy*, testimony of Erping Zhang, June 5, 2003, p. 72. The State Department's 2003 *Country Reports on Human Rights Practices* also reports thirty thousand security personnel working as part of China's Internet control system.

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32. U.S.-China Economic and Security Review Commission, *Hearing on SARS in China: Implications for Information Control, Internet Censorship, and the Economy*, testimony of Dan Sutherland, June 5, 2003, p. 32.
33. U.S.-China Economic and Security Review Commission, *Hearing on SARS in China: Implications for Information Control, Internet Censorship, and the Economy*, testimony of Maochun Yu, June 5, 2003, p. 79.

## **ADDITIONAL VIEWS OF COMMISSIONER PATRICK A. MULLOY**

Reaching agreement on a Report such as this requires that each Commissioner not insist on his or her preferred wording for every paragraph or phrase. By working together, and with the help of able staff, we have achieved a unanimous, bipartisan, consensus on the complex issues we were charged by Congress to address. There are, however, two issues about which I feel compelled to make my own views absolutely clear because of their importance to our nation's welfare.

The first deals with the security relationship among the United States, Taiwan, and the People's Republic of China (PRC), which our governing statute charged us to examine. Commentators on this three-part relationship often assume that the United States is already committed to use our forces to assist in Taiwan's defense if the latter were attacked by the PRC. This is not the case.

The Joint Communiqué issued by the United States and the PRC at the conclusion of President Nixon's historic visit to that country on February 28, 1972, stated in part: "The United States acknowledges that all Chinese on either side of the Taiwan Strait maintain there is but one China and that Taiwan is a part of China. The United States government does not challenge that position." On January 1, 1979, in the Joint Communiqué issued by the government of the United States and the government of the PRC on the Establishment of Diplomatic Relations, the United States recognized the government of the PRC as the sole legal government of China, and it acknowledged the Chinese position that there is but one China and Taiwan is part of China.

Within that context, the two sides agreed that the people of the United States would continue to maintain cultural, commercial, and other unofficial ties with the people of Taiwan. On this basis, relations between the United States and China were normalized. Our government then abrogated the United States-Republic of China (Taiwan) Defense Treaty. The 1979 Communiqué was issued when President Carter was in office. The above description of what the 1979 Communiqué meant to accomplish is confirmed verbatim in the 1982 Joint Communiqué issued during President Reagan's first term. The latter Communiqué reiterates that the United States has no intention of pursuing a policy of "two Chinas" or "one China, one Taiwan".

On April 10, 1979, the Taiwan Relations Act was signed into law, and among other things, it sets forth U.S. national policy regarding the security of Taiwan. It states "any effort to determine the future of Taiwan by other than peaceful means" would be "of grave concern to the United States." It further states that it is U.S. policy "to provide Taiwan with arms of a defensive character" and "to

maintain the capacity of the United States to resist any resort to force” with regards to Taiwan.

Significantly, the Taiwan Relations Act makes no commitment to have U.S. forces defend Taiwan. Rather it provides that the President is directed to inform the Congress promptly:

*Of any threat to the security or the social or the economic system of the people of Taiwan, and any danger to the interests of the United States arising there-from. The President and Congress shall determine, in accordance with constitutional processes, appropriate action by the United States in response to any such danger.*

This is an important distinction that the United States has used to maintain a policy of “strategic ambiguity” with regard to whether it would employ American forces to help defend Taiwan from an attack by the PRC. The United States has always recognized that if Taiwan believed that our commitment to its security was without limits, it might be emboldened in its dealings with the PRC perhaps to the point of provoking a conflict, by among other things, moving toward an independence that our government does not support.

In a March 2, 2004, speech to the Heritage Foundation, Secretary of State Colin Powell stated, “We adhere firmly to our One-China policy as defined by the three communiqués and the Taiwan Relations Act. We do not support Taiwan’s independence and we oppose moves by either side to unilaterally change the status quo.” While the United States does want to assist Taiwan in preserving its thriving democracy and robust economy, it is necessary for the governing authorities on that island to fully recognize the parameters of our commitment to them under the Taiwan Relations Act and the three Communiqués.

The other matter I want to highlight is the Commission’s finding in Chapter 7 that the Chinese government has instituted policies to accelerate the growth of its high technology industries whose growth, that government believes, can help lift the whole economy. While China cannot be faulted for instituting policies that do not violate its WTO and other trade agreement obligations, we, as a nation, must ensure that the growth of China’s high tech economy does not result in the deterioration of our own. That is why the Commission has recommended that our government develop a coordinated, comprehensive, national policy and strategy to maintain our own scientific and technological leadership.

Such a strategy must be multifaceted including, among other things, increased emphasis on science education, modernizing our nation’s infrastructure, vigorously enforcing our trade laws and agreements, providing real retraining for displaced workers, increasing funding incentives for the development of possible breakthrough technologies, and ensuring we have an international financial architecture that does not undermine our manufacturers through exchange rate misalignments. Developing and implementing such a policy is, in my view, a key challenge for our nation and ultimately the standard of living of our citizens and our national security will be dependent on how we meet it.

## ADDITIONAL VIEWS OF COMMISSIONER WILLIAM A. REINSCH

Although this Report has a number of troubling elements, I have decided to sign it, largely in recognition of the progress the Commission has made since its first Report in moving toward balance and objectivity. While the first Report merrily drove off the credibility cliff at a high rate of speed, this one teeters on the edge but ultimately pulls back from disaster, at least with respect to its recommendations. That means my support for this document is based largely on the bad things that are missing from it rather than the good things that are in it. Even so, the progress in muted rhetoric and not unreasonable recommendations is noteworthy, and I hope my support this year will encourage the Commission to do even better next time.

On the plus side, the Report avoids much of the excessive verbiage and sweeping judgments that compromised the 2002 Report. As a consequence, this Report has fewer rhetorical excesses and is more focused on matters within the Commission's purview.

Second, the hearings on which the Report is based were balanced. Unfortunately, that balance is not fully reflected, as the Commission majority has chosen to continue its habit of selective quotation, but the Chairman deserves to be commended for his efforts to ensure varied points of view were presented in testimony.

Third, a number of the less well-considered recommendations from 2002 are not repeated, and, in the interest of not disturbing the hopefully dead, I will not resurrect them here.

Fourth, a number of the recommendations are thoughtful and validate the policy of constructive engagement that I believe to be correct.

Despite these improvements, the Report contains serious flaws.

- 1) The tone of the Report continues its predecessor's focus on the negative. In short, the indictments of China keep changing, but the verdict is always the same—guilty. The Report's perspective is simple and simplistic: we are right; China is wrong; the only issue is how to force them to do what we want.

There are some circumstances—human rights, worker rights, nonproliferation—where Chinese behavior is clearly outside the norm, and a strong, principled U.S. position is appropriate, although the Commission majority's assumption that unilateral action by the United States can solve these problems is naive.

In other areas however, particularly economic and trade policy and cross-Straits issues, "right" and "wrong" are murkier. The Chinese are pursuing policies they believe are in their interest, many of which appear to be actually working, in contrast to some of our own economic policies. To the extent they are violating WTO rules or other treaties or are not fulfilling obligations they have undertaken, it is appropriate for us to act, and the Report properly takes note of those circumstances. In my judgment, however, the Report grossly overestimates the ability of the United States, acting by itself,

to pressure the Chinese to alter their course. It will take patience, subtlety and diplomatic creativity more than the ham-handed use of “leverage” advocated in this Report to achieve that result.

To be more specific, with respect to the exchange rate issue, the Report avoids arbitrary or provocative recommendations but steps up to the brink in its assumption that the United States can somehow force the Chinese to revalue. The Report’s fondness for legislated or juridical solutions is ill-suited to the nuanced world of exchange rates. Likewise, the section on Chinese involvement in Western capital markets usefully focuses on an issue that is growing in importance and again avoids over the top recommendations, but the clear implication is that the government ought to be doing more to influence or limit investor choices, despite evidence that the market itself appears to be addressing the problem.

Similarly, the chapter on nonproliferation gives China too much responsibility for solving the situation in North Korea and takes too little note of the failures of U.S. policy over the past three years.

- 2) The Report is deficient in its treatment of China’s domestic economic problems. The bulk of the economic section deals with Chinese actions that disadvantage the United States and increase our bilateral deficit. While individual domestic problems, such as bad bank loans and growing inflation, are mentioned, there is little effort to place them in a larger context and evaluate their likely impact on the bilateral relationship. The implicit—and simplistic—assumption is two straight lines—China is growing stronger while the United States grows weaker. This may well turn out to be true, but many of us said the same thing about Japan and the United States in the late 1980s. Having been proved wrong once, I am more skeptical than my colleagues that they will be right this time. In particular, the Report virtually ignores growing signs of internal economic difficulties that could seriously compromise growth and create internal economic and political crises that would at best preoccupy and at worst directly threaten the current government.

- 3) The Report makes a number of recommendations which I strongly oppose, but space permits listing only two:

The recommendation for additional sanctions legislation (Chapter 5) is entirely unnecessary and inappropriate. More than adequate authority to impose sanctions already exists, making the recommendation unnecessary, and the uniformly poor record of sanctions in accomplishing their objectives makes it unwise.

The recommendation for retaliation against companies that sell weapons-related items to the Chinese (Chapter 8) could have serious adverse implications for NATO interoperability and transatlantic defense cooperation were the EU arms embargo to be lifted.

Despite these objections and misgivings, I have decided to sign the Report, in significant part to acknowledge the Commission's rejection of so many of the unwise recommendations it considered. I hope that in the next iteration we are able to move beyond the simplistic "we're right; they're wrong" approach and undertake more sophisticated analysis that better explains the complexities of the bilateral relationship and the long term implications for the United States of China's economic and political growth and development.

**ADDITIONAL VIEWS OF  
COMMISSIONERS LARRY M. WORTZEL AND  
STEPHEN D BRYEN**

We agree with the general thrust of this Report and the majority of its findings and recommendations. However, we find its approach to foreign trade and commerce to be far too protectionist. Further, while we agree with the general approach to assessing the relationship between high technology trade and security, we believe that more attention needs to be paid to the specific improvements in Chinese defense-related products that flow from the trade in dual use (civil-military) items that are covered by the Export Administration Act (EAA).

The tone of the discussion of job growth and the effect of the globalization of industrial production on the United States needs correction in our view. The term “a jobless recovery” that appears several times in the Report is partisan and both emotionally and politically loaded. It is also factually incorrect. A “jobless recovery” is a myth that masks the strength of the American economy and its flexibility.

The assertion in the Report that job growth is not taking place rests on a single measure, total non-farm payroll employment as measured by the U.S. Department of Labor’s payroll survey. As The Heritage Foundation pointed out in its May 13, 2004, Backgrounder #1757, “jobless claims are now 10 percent below the 25 year average.” Additionally, the household survey, which is the only direct employment survey of Americans, shows that “2.2 million more Americans are employed now than were employed in November 2001.” The U.S. labor force has grown by 2.3 million people since November 2001, showing real gains in employment even while the size of the labor force is growing.

It is true that there is significant dislocation of the U.S. labor force as a result of structural change in the U.S. economy. But even net jobs may be gained as a result of outsourcing. According to a March 30, 2004 study by Global Insight (USA) Inc., also cited the Heritage Backgrounder #1757, “the incremental activity that follows offshore information technology outsourcing created over 90,000 net new jobs in 2003, and is expected to create 317,000 net new jobs in 2008.” To take advantage of these new employment opportunities, however, means that workers may need new training and education and may have to relocate.

“Insourcing” of new jobs into the United States is also taking place as a result of the globalization of manufacturing. As cited in the same Heritage Foundation paper, “according to the Organization for International Investing, over the last 15 years ‘insourced’ jobs grew by 82 percent, at an annual rate of 5.5 percent, and manufacturing ‘outsourced’ jobs grew by 23 percent, at an annual rate of 1.5 percent.” There are 14,000 workers employed at Honda plants in Ohio and 4,300 workers at the BMW factory in South Carolina. Michigan has 244,200 ‘insourced’ workers, Ohio has 242,200, and Idaho has 13,900 ‘insourced’ jobs.

It is also important to consider that labor dislocation because of structural changes in the economy is not unique to the United States. While U.S. manufacturing jobs have declined by eleven per-

cent between 1995 and 2002, China has lost fifteen percent of its industrial jobs in the same time frame. The loss of 2.45 million manufacturing jobs, which is the current rate in the United States, are about the same as the losses the United States experienced between 1979 and 1982. General employment in the United States recovered when new American companies created new jobs in new sectors of the economy.

Jobs can be created in the United States, and foreign companies attracted to the United States creating “insourced” jobs, by reducing frivolous lawsuits against manufacturers and products, eliminating burdensome taxes and regulations in localities and states, simplifying the tax code, and ensuring affordable energy supplies.

The Report is also too protectionist and some of its recommendations too quick to suggest broad government sanctions on trade. Every American has the power to sanction China, or any other country, in his or her pocket by exercising choice in the marketplace. By refusing to purchase goods from specific manufacturers or countries Americans can deliver a powerful message that they want different suppliers. Concerned citizens or interest groups must educate the American public if they want action. Of course, for a short period of time a consumer may have to pay more for an item or do without certain items until the marketplace adjusts.

Finally, the Report has devoted too little attention to the need to revise the Export Administration Act (EAA), which controls the export of dual use (civil-military) items and technologies. The Commission should study the effect of dual use technology transfers to China on defense production there and how Chinese defense industry has managed to improve the military as a result of those dual use transfers. The EAA has not been updated since 1979, thus law and regulation have failed to keep up with globalization and advances in technology. Congress must tackle that task.



**COMMISSIONERS APPROVING THE REPORT**

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**APPENDIX I**  
**UNITED STATES-CHINA ECONOMIC AND  
SECURITY REVIEW COMMISSION CHARTER**

**22 USCS/7002 (2001)**

The Commission was created on October 30, 2000 by the Floyd D. Spence National Defense Authorization Act for 2001 § 1238, Pub. L. No. 106-398, 114 STAT. 1654A-334 (2000) (codified at 22 U.S.C. § 7002 (2001), as amended by the Treasury and General Government Appropriations Act for 2002 § 645 (regarding employment status of staff) & § 648 (regarding changing annual report due date from March to June), Pub. L. No. 107-67, 115 STAT. 514 (Nov. 12, 2001); as amended by Division P of the “Consolidated Appropriations Resolution, 2003,” Pub. L. No. 108-7 (Feb. 20, 2003) (regarding Commission name change, terms of Commissioners, and responsibilities of Commission).

**§ 7002. United States-China Economic and Security Review Commission**

(a) Purposes. The purposes of this section are as follows:

(1) To establish the United States-China Economic and Security Review Commission to review the national security implications of trade and economic ties between the United States and the People’s Republic of China.

(2) To facilitate the assumption by the United States-China Economic and Security Review Commission of its duties regarding the review referred to in paragraph (1) by providing for the transfer to that Commission of staff, materials, and infrastructure (including leased premises) of the Trade Deficit Review Commission that are appropriate for the review upon the submittal of the final report of the Trade Deficit Review Commission.

(b) Establishment of United States-China Economic and Security Review Commission.

(1) In general. There is hereby established a commission to be known as the United States-China Economic and Security Review Commission (in this section referred to as the “Commission”).

(2) Purpose. The purpose of the Commission is to monitor, investigate, and report to Congress on the national security implications of the bilateral trade and economic relationship between the United States and the People’s Republic of China.

(3) Membership. The United States-China Economic and Security Review Commission shall be composed of 12 members, who shall be appointed in the same manner provided for the appointment of members of the Trade Deficit Review Commission under section 127(c)(3) of the Trade Deficit Review Commission Act (19 U.S.C. 2213 note), except that—

(A) Appointment of members by the Speaker of the House of Representatives shall be made after consultation with the chairman of the Committee on Armed Services of the House of Representatives, in addition to consultation with the chairman of the Committee on Ways and Means of the House of Representatives provided for under clause (iii) of subparagraph (A) of that section;

(B) Appointment of members by the President pro tempore of the Senate upon the recommendation of the majority leader of the Senate shall be made after consultation with the chairman of the Committee on Armed Services of the Senate, in addition to consultation with the chairman of the Committee on Finance of the Senate provided for under clause (i) of that subparagraph;

(C) Appointment of members by the President pro tempore of the Senate upon the recommendation of the minority leader of the Senate shall be made after consultation with the ranking minority member of the Committee on Armed Services of the Senate, in addition to consultation with the ranking minority member of the Committee on Finance of the Senate provided for under clause (ii) of that subparagraph;

(D) Appointment of members by the minority leader of the House of Representatives shall be made after consultation with the ranking minority member of the Committee on Armed Services of the House of Representatives, in addition to consultation with the ranking minority member of the Committee on Ways and Means of the House of Representatives provided for under clause (iv) of that subparagraph;

(E) Persons appointed to the Commission shall have expertise in national security matters and United States-China relations, in addition to the expertise provided for under subparagraph (B)(i)(I) of that section;

(F) Each appointing authority referred to under subparagraphs (A) through (D) of this paragraph shall—

(i) appoint 3 members to the Commission;

(ii) make the appointments on a staggered term basis, such that—

(I) 1 appointment shall be for a term expiring on December 31, 2003;

(II) 1 appointment shall be for a term expiring on December 31, 2004; and

(III) 1 appointment shall be for a term expiring on December 31, 2005;

(iii) make all subsequent appointments on an approximate 2-year term basis to expire on December 31 of the applicable year; and

(iv) make appointments not later than 30 days after the date on which each new Congress convenes.

(G) Members of the Commission may be reappointed for additional terms of service as members of the Commission; and

(H) Members of the Trade Deficit Review Commission as of the date of the enactment of this Act [enacted Oct. 30, 2000] shall serve as members of the United States-China Economic and Security Review Commission until such time as members are first appointed to the United States-China Economic and Security Review Commission under this paragraph.

(4) Retention of support. The United States-China Economic and Security Review Commission shall retain and make use of such staff, materials, and infrastructure (including leased premises) of the Trade Deficit Review Commission as the United States-China Economic and Security Review Commission determines, in the judgment of the members of the United States-China Economic and Security Review Commission, are required to facilitate the ready commencement of activities of the United States-China Economic and Security Review Commission under subsection (c) or to carry out such activities after the commencement of such activities.

(5) Chairman and vice chairman. The members of the Commission shall select a Chairman and Vice Chairman of the Commission from among the members of the Commission.

(6) Meetings.

(A) Meetings. The Commission shall meet at the call of the Chairman of the Commission.

(B) Quorum. A majority of the members of the Commission shall constitute a quorum for the transaction of business of the Commission.

(7) Voting. Each member of the Commission shall be entitled to one vote, which shall be equal to the vote of every other member of the Commission.

(c) Duties.

(1) Annual report. Not later than June 1 each year [beginning in 2002], the Commission shall submit to Congress a report, in both unclassified and classified form, regarding the national security implications and impact of the bilateral trade and economic relationship between the United States and the People's Republic of China. The report shall include a full analysis, along with conclusions and recommendations for legislative and administrative actions, if any, of the national security implications for the United States of the trade and current balances with the People's Republic of China in goods and services, financial transactions, and technology transfers. The Commission shall also take into account patterns of trade and transfers through third countries to the extent practicable.

(2) Contents of report. Each report under paragraph (1) shall include, at a minimum, a full discussion of the following:

(A) The portion of trade in goods and services with the United States that the People's Republic of China dedicates to military systems or systems of a dual nature that could be used for military purposes.

(B) The acquisition by the People's Republic of China of advanced military or dual-use technologies from the United States by trade (including procurement) and other technology transfers, especially those transfers, if any, that contribute to the proliferation of weapons of mass destruction or their delivery systems, or that undermine international agreements or United States laws with respect to nonproliferation.

(C) Any transfers, other than those identified under subparagraph (B), to the military systems of the People's Republic of China made by United States firms and United States-based multinational corporations.

(D) An analysis of the statements and writing of the People's Republic of China officials and officially-sanctioned writings that bear

on the intentions, if any, of the Government of the People's Republic of China regarding the pursuit of military competition with, and leverage over, or cooperation with, the United States and the Asian allies of the United States.

(E) The military actions taken by the Government of the People's Republic of China during the preceding year that bear on the national security of the United States and the regional stability of the Asian allies of the United States.

(F) The effects, if any, on the national security interests of the United States of the use by the People's Republic of China of financial transactions and capital flow and currency manipulations.

(G) Any action taken by the Government of the People's Republic of China in the context of the World Trade Organization that is adverse or favorable to the United States national security interests.

(H) Patterns of trade and investment between the People's Republic of China and its major trading partners, other than the United States, that appear to be substantively different from trade and investment patterns with the United States and whether the differences have any national security implications for the United States.

(I) The extent to which the trade surplus of the People's Republic of China with the United States enhances the military budget of the People's Republic of China.

(J) An overall assessment of the state of the security challenges presented by the People's Republic of China to the United States and whether the security challenges are increasing or decreasing from previous years.

(3) Recommendations of report. Each report under paragraph (1) shall also include recommendations for action by Congress or the President, or both, including specific recommendations for the United States to invoke Article XXI (relating to security exceptions) of the General Agreement on Tariffs and Trade 1994 with respect to the People's Republic of China, as a result of any adverse impact on the national security interests of the United States.

(d) Hearings.

(1) In general. The Commission or, at its direction, any panel or member of the Commission, may for the purpose of carrying out the provisions of this section, hold hearings, sit and act at times and places, take testimony, receive evidence, and administer oaths to the extent that the Commission or any panel or member considers advisable.

(2) Information. The Commission may secure directly from the Department of Defense, the Central Intelligence Agency, and any other Federal department or agency information that the Commission considers necessary to enable the Commission to carry out its duties under this section, except the provision of intelligence information to the Commission shall be made with due regard for the protection from unauthorized disclosure of classified information relating to sensitive intelligence sources and methods or other exceptionally sensitive matters, under procedures approved by the Director of Central Intelligence.

(3) Security. The Office of Senate Security shall—

(A) provide classified storage and meeting and hearing spaces, when necessary, for the Commission; and

(B) assist members and staff of the Commission in obtaining security clearances.

(4) Security clearances. All members of the Commission and appropriate staff shall be sworn and hold appropriate security clearances.

(e) Commission personnel matters.

(1) Compensation of members. Members of the United States-China Economic and Security Review Commission shall be compensated in the same manner provided for the compensation of members of the Trade Deficit Review Commission under section 127(g)(1) and section 127(g)(6) of the Trade Deficit Review Commission Act (19 U.S.C. 2213 note).

(2) Travel expenses. Travel expenses of the United States-China Economic and Security Review Commission shall be allowed in the same manner provided for the allowance of the travel expenses of the Trade Deficit Review Commission under section 127(g)(2) of the Trade Deficit Review Commission Act [19 USCS § 2213 note].

(3) Staff. An executive director and other additional personnel for the United States-China Economic and Security Review Commission shall be appointed, compensated, and terminated in the same manner provided for the appointment, compensation, and termination of the executive director and other personnel of the Trade Deficit Review Commission under section 127(g)(3) and section 127(g)(6) of the Trade Deficit Review Commission Act [19 USCS § 2213 note]. The executive director and any personnel who are employees of the United States-China Economic and Security Review Commission shall be employees under section 2105 of title 5, United States Code, for purposes of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of that title [language of 2001 amendment, Sec. 645].

(4) Detail of government employees. Federal Government employees may be detailed to the United States-China Economic and Security Review Commission in the same manner provided for the detail of Federal Government employees to the Trade Deficit Review Commission under section 127(g)(4) of the Trade Deficit Review Commission Act [19 USCS § 2213 note].

(5) Foreign travel for official purposes. Foreign travel for official purposes by members and staff of the Commission may be authorized by either the Chairman or the Vice Chairman of the Commission.

(6) Procurement of temporary and intermittent services. The Chairman of the United States-China Economic and Security Review Commission may procure temporary and intermittent services for the United States-China Economic and Security Review Commission in the same manner provided for the procurement of temporary and intermittent services for the Trade Deficit Review Commission under section 127(g)(5) of the Trade Deficit Review Commission Act [19 USCS § 2213 note].

(f) Authorization of appropriations.

(1) In general. There is authorized to be appropriated to the Commission for fiscal year 2001, and for each fiscal year thereafter, such sums as may be necessary to enable the Commission to carry out its functions under this section.

(2) Availability. Amounts appropriated to the Commission shall remain available until expended.

(g) Federal Advisory Committee Act. The provisions of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Commission.

(h) Effective date. This section shall take effect on the first day of the 107th Congress.

**Amendments:**

SEC. 645. (a) Section 1238(e)(3) of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (as enacted by Public Law 106–398) is amended by adding at the end the following: “The executive director and any personnel who are employees of the United States-China Economic and Security Review Commission shall be employees under section 2105 of title 5, United States Code, for purposes of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of that title.” (b) The amendment made by this section shall take effect on January 3, 2001.

SEC. 648. DEADLINE FOR SUBMISSION OF ANNUAL REPORTS BY UNITED STATES-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION. Section 1238(c)(1) of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (as enacted into law by section I of Public Law 106–398) is amended by striking “March” and inserting “June.”

Changes: Enacted into law by Division P of the “Consolidated Appropriations Resolution, 2003” Pub. L. 108–7 dated February 20, 2003:

H. J. Res. 2—

DIVISION P—UNITED STATES-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

SECTION 1. SHORT TITLE.—This division may be cited as the “United States-China Economic and Security Review Commission.”

SEC. 2. (a) APPROPRIATIONS.—There are appropriated, out of any funds in the Treasury not otherwise appropriated, \$1,800,000, to remain available until expended, to the United States-China Economic and Security Review Commission.

(b) NAME CHANGE.—

(1) IN GENERAL.—Section 1238 of the Floyd D. Spence National Defense Authorization Act of 2001 (22 U.S.C. 7002) is amended—as follows:

In each Section and Subsection where it appears, the name is changed to the “U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION”—

(2) REFERENCES.—Any reference in any Federal law, Executive order, rule, regulation, or delegation of authority, or any document of or relating to the United States-China Security Review Commission shall be deemed to refer to the United States-China Economic and Security Review Commission.

(c) MEMBERSHIP, RESPONSIBILITIES, AND TERMS.—

(1) IN GENERAL.—Section 1238(b)(3) of the Floyd D. Spence National Defense Authorization Act of 2001 (22 U.S.C. 7002) is amended by striking subparagraph (F) and inserting the following:

“(F) each appointing authority referred to under subparagraphs (A) through (D) of this paragraph shall—

“(i) appoint 3 members to the Commission;

“(ii) make the appointments on a staggered term basis, such that—

“(I) 1 appointment shall be for a term expiring on December 31, 2003;

“(II) 1 appointment shall be for a term expiring on December 31, 2004; and

“(III) 1 appointment shall be for a term expiring on December 31, 2005;

“(iii) make all subsequent appointments on an approximate 2-year term basis to expire on December 31 of the applicable year; and

“(iv) make appointments not later than 30 days after the date on which each new Congress convenes;”.

(2) RESPONSIBILITIES OF THE COMMISSION.—The United States-China Commission shall focus, in lieu of any other areas of work or study, on the following:

(A) PROLIFERATION PRACTICES.—The Commission shall analyze and assess the Chinese role in the proliferation of weapons of mass destruction and other weapons (including dual use technologies) to terrorist-sponsoring states, and suggest possible steps which the United States might take, including economic sanctions, to encourage the Chinese to stop such practices.

(B) ECONOMIC REFORMS AND UNITED STATES ECONOMIC TRANSFERS.—The Commission shall analyze and assess the qualitative and quantitative nature of the shift of United States production activities to China, including the relocation of high-technology, manufacturing, and R&D facilities; the impact of these transfers on United States national security, including political influence by the Chinese Government over American firms, dependence of the United States national security industrial base on Chinese imports, the adequacy of United States export control laws, and the effect of these transfers on United States economic security, employment, and the standard of living of the American people; analyze China’s national budget and assess China’s fiscal strength to address internal instability problems and assess the likelihood of externalization of such problems.

(C) ENERGY.—The Commission shall evaluate and assess how China’s large and growing economy will impact upon world energy supplies and the role the United States can play, including joint R&D efforts and technological assistance, in influencing China’s energy policy.

(D) UNITED STATES CAPITAL MARKETS.—The Commission shall evaluate the extent of Chinese access to, and use of United States capital markets, and whether the existing disclosure and transparency rules are adequate to identify Chinese companies which are active in United States markets and are also engaged in proliferation activities or other activities harmful to United States security interests.

(E) CORPORATE REPORTING.—The Commission shall assess United States trade and investment relationship with China, including the need for corporate reporting on United States invest-

ments in China and incentives that China may be offering to United States corporations to relocate production and R&D to China.

(F) REGIONAL ECONOMIC AND SECURITY IMPACTS.—The Commission shall assess the extent of China’s “hollowing out” of Asian manufacturing economies, and the impact on United States economic and security interests in the region; review the triangular economic and security relationship among the United States, Taipei and Beijing, including Beijing’s military modernization and force deployments aimed at Taipei, and the adequacy of United States executive branch coordination and consultation with Congress on United States arms sales and defense relationship with Taipei.

(G) UNITED STATES-CHINA BILATERAL PROGRAMS.—The Commission shall assess science and technology programs to evaluate if the United States is developing an adequate coordinating mechanism with appropriate review by the intelligence community with Congress; assess the degree of non-compliance by China and United States-China agreements on prison labor imports and intellectual property rights; evaluate United States enforcement policies; and recommend what new measures the United States Government might take to strengthen our laws and enforcement activities and to encourage compliance by the Chinese.

(H) WORLD TRADE ORGANIZATION COMPLIANCE.—The Commission shall review China’s record of compliance to date with its accession agreement to the WTO, and explore what incentives and policy initiatives should be pursued to promote further compliance by China.

(I) MEDIA CONTROL.—The Commission shall evaluate Chinese government efforts to influence and control perceptions of the United States and its policies through the internet, the Chinese print and electronic media, and Chinese internal propaganda.

(3) EFFECTIVE DATE.—This section shall take effect on the date of enactment of this Act [February 20, 2003].

## APPENDIX II COMMUNICATIONS WITH CONGRESS

MAY 21, 2004

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House of Representatives, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our April 16, 2004 hearing on "***China's Presence in the Global Capital Markets.***"

This hearing addresses the charge in our mandate to examine "Chinese access to, and use of United States capital markets, and whether the existing disclosure and transparency rules are adequate to identify Chinese companies which are active in United States markets and are also engaged in proliferation activities or other activities harmful to United States security interests." This is a cutting-edge element of our broader look at the U.S.-China economic relationship.

At this hearing the Commission heard testimony from two panels of witnesses on the goals, methods and implications of Chinese firms' use of global debt and equity markets to raise capital. Witnesses expressed particular concern about the governance and transparency of Chinese enterprises listing on U.S. exchanges. Recently, these listings have come under increased scrutiny in light of the Securities and Exchange Commission's investigation into China Life's accounting irregularities and a trade secret theft and patent infringement suit brought in U.S. courts against Semiconductor Manufacturing International Corporation, two Chinese firms listed on the New York Stock Exchange. However, despite mounting investor apprehension, China's outreach to international capital markets continues to grow in size and frequency, with some analysts forecasting the volume of Chinese company initial public offerings (IPOs) in the global markets to be as high as \$23 billion for 2004.

Accessing international capital markets is an important component of China's economic development strategy. Notably, despite the fact that Chinese private firms account for roughly 60 percent of the country's GDP, the Chinese government has permitted state-owned enterprises (SOEs) to launch the overwhelming majority of IPOs in global capital markets. Chinese SOEs listing on global capital markets generally remain under the control of the Chinese government whose corporate governance and disclosure practices differ significantly from U.S. norms. With billions of dollars in U.S. inves-

tor funds being attracted by these firms, it is vital to understand whether U.S. investors are being provided adequate information about these firms' governance and financial performance, and whether U.S. regulatory requirements are sufficient to capture this concern.

The Commission also heard testimony about potential linkages between listed Chinese firms and China's defense-industrial complex and weapons proliferation activities. Such security-sensitive activities could constitute a material risk to investors because of the possible negative impact on the share value and reputations of these enterprises. More fundamentally, the Commission is concerned about whether the U.S. Government is sufficiently monitoring this nexus and focused on the potential security implications.

The Commission will provide a comprehensive analysis of this issue, along with recommendations for Congressional action, as part of its upcoming report to the Congress.

Sincerely,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*

APRIL 6, 2004

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House of Representatives, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our San Diego, CA field hearing on February 12 and 13, 2004 examining "China as an Emerging Regional and Technological Power: Implications for U.S. Economic and Security Interests." China's technology development, and the pivotal role it plays in the global supply chain for high-tech goods and services, has important implications for U.S. economic and security interests.

The Commission is mandated (P.L. 108-7) to assess the qualitative and quantitative nature of the shift of United States production activities to China, including the relocation of high-technology, manufacturing and research and development facilities. Additionally the Commission is directed to examine China's performance in protecting intellectual property rights, a key area of concern in U.S.-China high-tech trade.

During this field hearing, held on the campus of the University of California, San Diego, the Commission heard testimony from a number of scholars and representatives of California's technology

industry. During the discussion, panelists highlighted several important themes:

*China's High-Tech Development.* The Chinese government has a coordinated, sustainable vision for science and technology development. Many Chinese high-technology developments have been spurred by policies the Chinese government has instituted to accelerate the growth of industries in this sector, which the government believes can help lift the whole economy.

The Chinese government uses foreign investment, technology standards, and industry regulation to catalyze the nation's technological growth. Government procurement remains a lever for technology policy, as do proprietary technology standards. If foreign companies adopt Chinese promulgated standards to get access to the growing Chinese market, they help build economies of scale, which then encourages the growth of exports out of China with these new standards. An example of this is China's new wireless LAN standard. The Chinese government also uses its power over state corporations, and over companies that require licenses to produce or provide services, to organize bargaining cartels with foreign corporations to encourage technology transfers into China.

Several hearing panelists noted the importance of China's high-tech development to U.S. computer and electronics firms who are using it as a production base. One panelist noted that American computer and electronics firms had a rate of return in China of over 20 percent in 2002. Such profits encourage them to go along with Chinese ground rules for technology transfer. China is already the second largest computer manufacturer in the world, and it is expected that higher valued jobs in design, development and engineering will follow manufacturing to China.

China is also making strides in the advanced fields of pharmaceutical and biotechnology production. Products manufactured by China's pharmaceutical companies have to date principally been generic, but foreign investment and the transfers of technology and management systems that accompany this investment are accelerating the growth of a more sophisticated pharmaceutical industry. Foreign manufacturers of pharmaceuticals are beginning to establish R&D facilities in China. The biotech industry in China is also growing. According to one hearing panelist from the U.S. biotech industry, the Chinese government is supporting its development through the annual investment of over \$600 million into universities, research centers, and labs. The Chinese government is encouraging Chinese nationals who have obtained Ph.D.'s in the life sciences field in the United States to return to China and is offering them incentives to do so.

*China's Role in the Global Supply Chain.* Global production networks dominate China's high-tech export environment. Foreign investment into China has provided capital, management and technology to Chinese production in various technology sectors. Taiwan firms are key investors and intermediaries in China's high-tech production networks.

*Maintaining the U.S. Technological Edge.* The U.S. role in global high-tech production chains is in the more skill and technology intensive activities, particularly in the R&D stage of production. American-developed technology advances and innovation has gen-

erally maintained the United States' status as a global economic leader. The Commission heard testimony from almost every panelist concerning the need for the United States to reinvest in its long-term human capital in order to maintain this technological edge. China currently graduates three times as many engineers as the United States at the bachelor's degree level. There is a great need for the U.S. Government to explore policies aimed at expanding educational opportunities in the mathematics and sciences fields, and for upgrading the U.S. technology infrastructure.

*China's Regional Outreach.* China has become more receptive toward working in a multilateral format, particularly groupings in which it can exercise a leadership role—such as the Asia Pacific Economic Cooperation (APEC) and the Shanghai Cooperation Organization (SCO). Moreover, China's growing economic influence in the region has enhanced its political leverage as well. This poses a challenge to ensure the United States is not excluded from the Asian region's economic and security forums and that China's role in these forums does not compromise U.S. goals in the region.

China's emergence as a center for high-tech manufacturing and R&D is one of the most significant dynamics of China's economic growth and an area the Commission will continue to follow closely as it poses significant economic and security challenges for the United States.

Yours truly,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*

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MARCH 10, 2004

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House of Representatives, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our hearing on February 6, 2004, on China's "Military Modernization and the Cross-Strait Balance." U.S. cross-Strait policy and U.S.-China relations are intertwined. Taiwan remains the key political and military flash point between the two countries, driving both China's military modernization efforts and U.S. military assistance to Taiwan.

The Commission is mandated by law (P.L. 108-7, Division P) to "review the triangular economic and security relationship among the United States, Taipei and Beijing, including Beijing's military modernization and force deployments aimed at Taipei, and the adequacy of United States Executive Branch coordination and con-

sultation with Congress on United States arms sales and defense relationship with Taipei.”

The Commission’s hearing took place at a time of heightened tension in cross-Strait relations. China’s ballistic missile build-up directed at Taiwan has been escalating in recent years. Such a build-up appears clearly designed to coerce Taiwan into accepting unification with China and/or to deter moves toward independence by Taiwan. In January, Taiwan President Chen Shui-bian announced his decision to hold a national referendum as part of the Presidential election balloting on March 20, 2004. The referendum would seek a national opinion on the question of whether Taiwan should deploy advanced anti-missile defenses to counter China’s missile deployment and whether Taiwan should be negotiating a cross-Strait framework for peace and stability with Beijing. The response from Beijing, which views the referendum as a further move toward independence by Taiwan, has been one of strong condemnation and rhetoric, including threats of a possible military response. President Bush has publicly reiterated U.S. opposition to actions by either side that seek to alter unilaterally the status quo. Notably, he made such a statement in the presence of visiting Chinese Premier Wen Jiabao in December.

During our hearing on February 6, the Commission heard from senior State and Defense Department officials on current developments in U.S.-China-Taiwan trilateral relations, from experts on the parameters of U.S. commitments to Taiwan under the Taiwan Relations Act (TRA) and the role of Congress laid out in the TRA, and from analysts of China’s military modernization programs and its military-industrial complex.

*China’s military modernization program.* Between 1989 and 2002, as China’s economy has rapidly expanded, China’s official defense budget for weapons procurement grew more than 1,000 percent, significantly outpacing China’s GDP growth. China’s People’s Liberation Army (PLA) has become a major buyer of foreign military technologies, and is now the principal purchaser of Russian military weapons and technology. China’s increased military spending and acquisitions of foreign military technologies have greatly enhanced China’s military capabilities.

During the late 1990s, the PLA began focusing its efforts toward developing military options and capabilities to prevent Taiwan from declaring independence. The PLA has undertaken programs designed to improve its force options against Taiwan and to deter and counter potential U.S. military intervention during any cross-Strait conflict. China’s military modernization is focused on exploiting vulnerabilities in Taiwan’s national and operational-level command and control system, its integrated air defense system, and Taiwan’s reliance on Sea Lines of Communication for sustenance. At the same time, Taiwan’s relative military strength appears likely to deteriorate unless Taiwan makes substantial new investments in its own defense.

The Commission also heard testimony that China’s defense firms have significantly improved their R&D techniques and their production processes. As the PLA shifts away from purchasing complete weapon systems from foreign suppliers to acquiring military-related technology, China’s defense production capabilities will be-

come a critical factor in the PLA's long-term effort to renovate its force structure. China has been able to serialize the production of destroyers based on stealthy designs with improved air defense and anti-submarine capability. China has also improved its ability to serial produce ballistic missiles with an increase in annual production of short-range ballistic missiles (SRBMs) from 50% to 75%. However, despite rapid improvements, China's defense industry is not yet capable of producing global state of the art weapons systems on par with the United States.

China's continuing missile build-up opposite Taiwan is a serious challenge to Taiwan's security. The Defense Department's 2003 report to the Congress on China's military indicates that China now has approximately 450 short range ballistic missiles that can strike Taiwan and forecasts that this number will grow substantially over the next few years.

Given these developments, the Commission is concerned by reports that the European Union (EU) nations are debating whether to lift the EU's current arms embargo on China, imposed in the wake of the Tiananmen Square crackdown in 1989, and begin selling military equipment to Beijing. The Commission believes such action would undermine legitimate security concerns, be destabilizing to the region, and is unjustified by any improvement in China's human rights record, as documented in the Department of State's recently released Human Rights Report 2003.

**Recommendation:** The Congress should urge the President and the Secretaries of State and Defense to strongly press their EU counterparts to maintain the EU arms embargo on China. Further, the Congress should request the Department of Defense to provide a comprehensive report to the appropriate committees of jurisdiction on the nature and scope of Russian military sales to China. In addition, Congress should urge the Executive Branch to continue its positive working relationship with the Israeli government to limit Israeli military sales to China.

*Taiwan Relations Act (TRA).* The Taiwan Relations Act gives Congress a joint role with the Executive Branch in the fashioning of U.S. cross-Strait policy, particularly with regard to how the U.S. should respond to cross-Strait conflicts and what arms the U.S. should sell to Taiwan to assist in its defense needs. Nonetheless, it appears that Congress has regularly been excluded from cross-Strait policy decisionmaking by a succession of Administrations. Congress has too often been notified only after the Administration has, in effect, made a decision on the sale of specific weapons to Taiwan. There has been some improvement in recent years in the consultative process between the Congress and the Executive Branch, but certain important documents or reports the Executive Branch has prepared on this subject have never been shared with the Congress. Given the potential for military conflict in the region, Congress needs to take a more direct oversight role in the process. The type of consultation that was envisioned by Congress at the time of passage of the TRA is going to be critical now in managing U.S. foreign policy towards China and Taiwan.

**Recommendation:** Congress should enhance its oversight role in the implementation of the TRA. Executive Branch officials

should be invited to consult on intentions and report on actions taken to implement the TRA through the regular committee hearing process of the Congress, thereby allowing for appropriate public debate on these important matters. This should include, at a minimum, an annual report on Taiwan's request for any military aid and a review of U.S.-Taiwan policy in light of the growing importance of this issue in U.S.-China relations.

**Recommendation:** The responsible committees of Congress should request that the Executive Branch make available to them a comprehensive catalogue and copies of all the principal formal understandings and other communications between the United States and both China and Taiwan on the parameters of the trilateral relationship, as well as other key historical documents clarifying U.S. policy in this area.

The Commission will be closely following cross-Strait developments in the run-up and aftermath of the Taiwan Presidential election and referendum vote on March 20. We may develop additional recommendations regarding Congressional-Executive Branch coordination on U.S. cross-Strait policy as part of our upcoming Report to Congress later this spring.

Sincerely,



Roger W. Robinson, Jr.  
Chairman



C. Richard D'Amato  
Vice Chairman

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Note:

*Commissioner Bryen dissented from the Commission's majority in submitting these recommendations.*

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MARCH 4, 2004

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House of Representatives, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our February 5, 2004 hearing on "*China and the WTO: Compliance and Monitoring.*"

China is not a fully developed market economy and was even less so at the time of its accession to the WTO. Integrating a large non-market economy into an international trading system that was designed for and dependent upon the efficient operations of markets posed a challenge of monumental proportions. To help meet this

challenge, China's accession agreement required it to implement changes to its laws and economic system that had generally been a prerequisite for entering members. WTO members accepted China into the organization only after negotiating the most complex accession agreement in WTO history, one that reflected a large number of commitments by China to transition to a market- and rules-based economy and special safeguards for the domestic industries of other WTO members that could be significantly injured by surges of imports from China's non-market economy. Assuring that China implements these commitments is a large and important task for the U.S. Government.

The Commission held this hearing with the twin goals of assessing China's progress in complying with its schedule of commitments and gauging the adequacy of U.S. Government monitoring processes. At our hearing, the Commission received the testimony of officials from the U.S. Trade Representative (USTR) and the Departments of Commerce, State, and Agriculture. A panel of legal experts compared the contemporary situation with China's stated obligations and with U.S. expectations at the time of China's accession. The Commission also heard from representatives of agriculture, business, industry and labor organizations, many of whose members have first-hand knowledge of China's practical compliance.

#### *China's Compliance*

China has made only mixed progress towards complying with its WTO obligations. For instance, China has generally completed a broad range of tariff reductions in accordance with timetables stipulated in the accession agreement. It has revised or enacted a large number of laws and regulations to bring its trade system into better conformity with WTO norms. In the services sector, it has reduced capitalization requirements for some financial services operations, but requirements remain higher than can be justified. After sustained pressure from U.S. officials, China reduced barriers to U.S. agriculture exports through reform of tariff-rate quota implementation. Despite these and other positive steps, China has on the whole fallen behind its schedule of commitments, and in some areas has implemented new barriers to trade to compensate for those it is removing.

Some of the most egregious gaps between commitments and current practices include: rampant abuse and lax protection of intellectual property rights, lack of transparency in adopting and applying regulations, the use of technical or safety standards to unreasonably exclude foreign products—including non-science-based sanitary and phytosanitary standards on agricultural products—implementation of discriminatory tax incentives to encourage U.S. and other foreign semiconductor companies to move their manufacturing operations to China, and obstacles to the domestic distribution of imported products.

The Commission finds that:

- China has made progress on WTO compliance in absolute terms, but this progress toward compliance has decelerated to an unacceptably slow pace. Furthermore, some lowered barriers to trade have been replaced by new barriers that deny

market access to U.S. exports of goods and services, a practice that we categorically reject.

### *Enforcement*

While the Commission is satisfied that the U.S. Government is competently monitoring China's compliance, we question the enforcement effort to date. The U.S. has yet to file a single dispute against China in the WTO, despite numerous clear violations disclosed at our hearing. The Commission understands that something of a 'honeymoon' period was necessary for China to have the opportunity to implement its accession commitments and to afford the U.S. the time to review China's nascent track record. The two years that have passed since China's accession represent a period of sufficient length for such restraint and forbearance, a period which we now expect to come to a close.

The Commission also acknowledges the value of settling a potential dispute case through bilateral negotiations, which offer the promise of relief for afflicted U.S. industries on a compressed time scale. However, such negotiations will find greater success if accompanied by a history of determined use of the WTO dispute resolution mechanism when necessary. The Commission therefore urges continued bilateral discussions on the catalog of compliance gaps, but similarly advocates vigilant use of formal channels for redress when China fails to address grievances.

One area of monitoring we found to be particularly lacking is the WTO's Transitional Review Mechanism (TRM) for reviewing China's compliance. This annual review process was established as part of China's accession agreement to the WTO. U.S. negotiators expected the TRM to be a robust mechanism for monitoring China's WTO compliance and applying multilateral pressure for improvement. In practice, the TRM has been undermined by China's refusal to abide by standard WTO procedural methods such as responding in writing to requests for information from other member countries and its unwillingness to have TRM issues raised in WTO subsidiary committee meetings at a sufficiently early stage to have a meaningful dialogue on the concerns. China argues that the normal customs of the WTO do not apply because the TRM is a discriminatory measure applying only to China. The Commission notes that China's entry into the WTO was conditioned on China's acceptance of the TRM and other special provisions intended to compensate for the disjunction between WTO standards and China's non-market economy and underdeveloped legal system. China accepted and signed the WTO agreement that created and governs the TRM and therefore should desist from arguing that it is discriminatory and instead cooperate in making it a useful mechanism to improve its implementation of its WTO obligations.

The Commission finds that:

- The TRM has failed to live up to the expectations of the U.S. and other WTO members that it would be a comprehensive tool for measuring and evaluating China's compliance with the full range of its commitments and a robust mechanism for putting multilateral pressure on China to address compliance shortfalls.

*U.S. Economic and National Security*

The Commission believes that the Executive Branch is sufficiently monitoring China's compliance with WTO obligations, and providing its results to the Congress and the public at large in a timely manner. However, the Commission finds that too little attention has been paid to the security implications of China's participation in the WTO. American economic security rests on a broad foundation of economic activity, and actions to protect U.S. economic security will be bolstered by measures employed to compel China's compliance with its WTO obligations. Finally, the U.S. must take care to preserve its domestic industries whose health is directly related to important military capabilities.

Based on the record of this hearing and the Commission's other work on these issues to date, we present the following preliminary recommendations to the Congress for consideration. The Commission will continue to develop these recommendations and provide additional guidance in our annual Report to the Congress.

**Preliminary Recommendations:**

- The U.S. Government should signal clearly to China that its WTO 'honeymoon' period has ended, and that the U.S. will no longer hesitate to secure its rights through formal recourse to the WTO when necessary. Such a statement should accompany the first filing of a WTO case. The Congress should press the Administration to use the WTO dispute settlement mechanism and/or U.S. trade laws, including Section 301 provisions, to seek redress for China's practices in the areas of exchange rate manipulation, denial of trading and distribution rights, massive violations of intellectual property rights (IPR) that have cost U.S. firms billions of dollars, and government subsidies to export industries that harm the competitiveness of U.S.-based manufacturing firms.
- China's preferential value-added tax (VAT) treatment for domestically designed and produced semiconductors and other discriminatory policies are encouraging large foreign investments into semiconductor manufacturing facilities in China, leading to a global overcapacity in that industry that threatens U.S. producers. The Commission commends ongoing USTR efforts to resolve the issue expeditiously through negotiations, but now recommends that the U.S. forthwith file a WTO case on the matter.
- China's WTO obligations for curbing the abuse of intellectual property rights demand not only China's promulgation of appropriate legislation or regulations, but also concrete results in the reduction of IPR violations, which are thus far lacking. The U.S. should offer China assistance in implementing a program to curb the abuse of IPR that includes criminal penalties against its citizens who engage in such WTO-required practices. This offer should be coupled with an explicit timeline for implementation and realization of results. The timeline should also guarantee filing of a WTO case if the offer is rebuffed or its implementation unsuccessful.

- The U.S. should put in place procedures for consulting with trading partners at the outset of each new dispute over China's compliance. Particular efforts should be made to work closely with the EU, Japan, and others to ensure that China lives up to its WTO commitments.
- USTR and other appropriate U.S. Government officials should undertake strenuous efforts to reform the TRM process into a meaningful multilateral review and measurement of China's compliance with its WTO commitments. If this is unsuccessful, the U.S. Government should initiate a parallel process with the EU, Japan, and other major trading partners to produce a unified annual report by which to measure and record China's progress toward compliance. This measurement and evaluation should be provided in detail to Congress as part of USTR's annual report on China's WTO compliance.
- The U.S. Government should make optimum use of the special Section 421 and textile safeguards negotiated as part of China's WTO accession agreement. These important safeguards were designed to prevent our domestic industries from being forced into bankruptcy by surges of Chinese exports. Although the International Trade Commission has recommended that Section 421 relief be granted on a number of occasions, they have yet to be approved by the Executive Branch. Testimony was presented to the Commission that the Chinese Government has hired U.S. law and government relation firms to lobby the Executive Branch to ensure that the special safeguards are not utilized. This puts private sector U.S. firms seeking implementation of the safeguards at a disadvantage and may have the effect of nullifying important safeguards Congress relied on in approving PNTR for China.
- The Congress should amend our countervailing duty laws to permit their usage in relation to non-market economies. For example, the Chinese Government makes non-market based loans to its state-owned enterprises, enabling them to export subsidized goods to the U.S. market that harm the competitiveness of U.S. manufacturers.
- The transfer of technology by U.S. investors in China where it is a WTO-inconsistent condition of doing business with Chinese partners under Part I, Section 7(3) of China's Accession Protocol remains an enduring security concern for the U.S. The Commission understands there has been some reduction of this practice, but condemns any remaining instances of it and asks U.S. companies to help maintain U.S. Government vigilance by reporting any continuing or future occurrences.

We hope that this hearing record and the Commission's above findings and recommendations will assist the Congress in assessing a complex but vital subject of U.S.-China economic relations. As always, we stand ready to present to any interested Committees or

Members the Commission's research and analysis on this and any other subject contained in the Commission's mandate.

Sincerely,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*

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*Note:*

*Commissioner Bryen dissented from the Commission's majority in submitting these preliminary recommendations.*

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MARCH 4, 2004

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House of Representatives, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our field investigation in Columbia, South Carolina on January 30, 2004. This field investigation titled, "*China's Impact on the U.S. Manufacturing Base*," gave the Commission the opportunity to examine the real, on-the-ground impacts of fast increasing Chinese imports and off-shore transfers by U.S. firms on the U.S. manufacturing base.

This investigation revealed the extent of the difficulties faced by America's manufacturers, workers and communities in the face of manufacturing competition from China and the urgent need for action to deal with them. The location was vital to the message. According to U.S. Department of Labor statistics, between November 2002 and November 2003, Columbia, South Carolina lost 12,000 jobs, which represents a 4 percent decrease, the largest percentage of jobs lost that year for any metropolitan area in the United States. The State of South Carolina lost 2.6 percent of its jobs over that same time period, the largest percent decrease of any State. In the manufacturing sector, South Carolina has lost 63,000 jobs, a nearly 20 percent decline over the past three years.

Representing bipartisan Congressional concerns about this matter, Senators Ernest F. Hollings (D-SC) and Lindsey O. Graham (R-SC) took part in the proceedings and expressed to the Commission their views regarding what they believed to be China's unfair trade policies, particularly its artificially undervalued currency, as well as export subsidies, dumping, and other WTO-inconsistent practices. Panelists representing South Carolina's manufacturing industries—including textile, apparel, steel and plastics—gave

vivid descriptions of the bottom line challenges they face from such Chinese competition.

### ***Unfair Chinese Trade Policies***

China's continued rapid growth in manufacturing, U.S. companies' willingness to move production abroad in order to cut costs, often referred to as offshore outsourcing, and China's policies aimed at encouraging growth and investment in its manufacturing base were discussed in depth at this investigation. In assessing causes of the worsening U.S. trade deficit and loss of U.S. manufacturing jobs, participants pointed to China's lack of labor and environmental standards, rampant infringement of intellectual property rights, state subsidization of its state-owned industries through preferential tax treatment, access to capital, and other benefits, and its record of lagging compliance with many important commitments under its WTO accession agreement. These factors have undermined the competitiveness of U.S. manufacturing firms in South Carolina and elsewhere in our country.

Overall, many of the hearing participants were exceedingly critical of the U.S.' trade strategy and policies. Many claimed that policies aimed at promoting free trade were in fact encouraging the transfer of manufacturing and research and development to China to the detriment of the U.S. economy.

### ***Industry Specific Considerations***

*Steel:* Over the last three years South Carolina's steel and metals industry has experienced a dramatic decline. Between November 2000 and November 2003, South Carolina's primary metals and fabricated metals industries lost a combined 7,300 jobs, representing contractions of 20 percent and 18.6 percent, respectively. According to the U.S. Department of Commerce, between 2000 and 2002, South Carolina's exports of primary metal manufactures fell from just over \$126 million to approximately \$76 million.

Panelists representing U.S. steel firms described the effect of competition from China on their industry. They noted that China's steel industry—which benefits from extensive capital subsidies from China's state-owned banks—has grown 10 percent in the last 12 months resulting in soaring demand for scrap steel and other inputs. One particularly ominous concern expressed by hearing panelists is that a slow down in the Chinese economy could reduce its domestic demand for steel and lead to dumping of subsidized Chinese steel in U.S. markets, resulting in further price pressures on U.S. steel producers.

*Textiles and Apparel:* The U.S. textile and apparel industries have suffered dramatically since China entered the WTO in 2001. Over 50 American textile plants closed in 2003, resulting in the loss of 49,000 jobs. One out of every four U.S. textile jobs that existed in January 2001 no longer exists. South Carolina's textile industry has suffered significant losses. In 2003, 4,000 textile workers in South Carolina lost their jobs. This was second only to North Carolina—whose textile industry lost 13,600 jobs.

Textile manufacturers and union representatives expressed deep-seated concern that the expiration of the Multifiber Arrangement on January 1, 2005 would allow China to capture a vast percentage

of the U.S. market and decimate the remaining U.S. textile industry, which still employs 630,000 people. Participants also alerted the Commission that new trade agreements, such as the Central American Free Trade Agreement (CAFTA), provide an opportunity for the transshipment of Chinese textiles through third country ports, which would undermine the China specific textile safeguards imposed by the U.S. against a range of Chinese goods in December.

To guard against surges of Chinese textile imports from subsidized state-owned factories, the U.S. negotiated a special textile safeguard as part of China's WTO accession agreement that allows the U.S. and other WTO members to impose restrictions on Chinese textile imports when they pose "a significant cause of material injury, or threat of material injury to the domestic industry." Although China entered the WTO in January 2002, the U.S. Government did not publish procedures to implement this safeguard until May 2003, and first used this provision in November 2003 when the Bush Administration announced the imposition of textile safeguards on select categories of knit fabric, dressing gowns, robes and bras imported from China. These year-long restraints became official on December 23, 2003. The Commission believes the U.S. Government has not been aggressive enough in using this textile safeguard.

Based on the record of this hearing and the Commission's other work on these issues to date, we present the following preliminary recommendations to the Congress for consideration. The Commission will continue to develop these recommendations and provide additional guidance in our annual Report to the Congress.

#### **Preliminary Recommendations:**

- The United States Trade Representative and the Department of Commerce should immediately undertake a comprehensive investigation of China's system of government subsidies for manufacturing, including tax incentives, preferential access to credit and capital from state-owned financial institutions, subsidized utilities, and investment conditions requiring technology transfers. USTR and Commerce should provide the results of this investigation in a report that lays out specific steps the U.S. Government can take to address these practices through U.S. trade laws, WTO rights and by utilizing special safeguards China agreed to as part of its WTO accession commitments.
- The U.S. tax code should be restructured to eliminate incentives for U.S. businesses, particularly manufacturing, but also services and high technology companies, to shift production, services, research and technology abroad. Tax incentives which reward relocation abroad should be removed from the tax code as soon as possible.
- USTR should press for provisions during the Doha Round that allow for increased penalties on firms that have been found in violation of anti-dumping laws on multiple occasions.
- The Administration should undertake a comprehensive review and reformation of the government's trade enforcement infrastructure in light of the limited efforts that have been directed at enforcing our trade laws. Such review should include consid-

eration of a proposal by Senator Hollings (D–SC) at our hearing to establish an Assistant Attorney General for International Trade Enforcement in the Department of Justice to enhance our capacity to enforce our trade laws. Moreover, the U.S. Government needs to place a renewed emphasis on enforcement of international labor standards and appropriate environmental standards.

- If we experience new surges of imports that threaten the U.S. steel industry, the United States should claim a national security exemption under Article XXI of the WTO for the steel industry because of its importance to our military manufacturing sector and our national security.
- The United States should work with other interested WTO members to convene an emergency session of the WTO governing body to extend the Multifiber Arrangement at least through 2008 to provide additional time for impacted industries.
- The U.S. Government should more fully and effectively make use of the Section 421 China-specific safeguard and the China textile safeguard available to WTO members. These were important provisions negotiated into China's WTO accession agreement and intended to provide relief for domestic industries hit with surges of imports from China.
- The leadership and appropriate Committees of Congress should convene a summit of leaders of the textile industry, its workers and their representatives, impacted communities and others to help define the crisis in the domestic textile and apparel industry as it related to trade with China and to define a plan of action to help address predatory trade practices and ensure that domestic capabilities exist to meet our Nation's economic and national security needs in this important area. As part of that effort, the Summit should:
  - Review recently completed free trade agreements and those under negotiation so as to avoid loopholes such as that present in the Central American Free Trade Agreement (CAFTA) that grant the Chinese textile industry the opportunity to circumvent American safeguard and tariff provisions.
  - Examine Customs Service efforts to monitor and inspect shipments of textile and apparel imports to ensure that the law is being appropriately enforced and determine what increases in resources are necessary to protect the rights and interests of the industry and its workers.

### ***Community Impacts***

The Commission heard powerful testimony on the extent to which trade-related economic dislocations have impacted many South Carolina manufacturing communities. The Commission was told that the significant loss of jobs in South Carolina due to import competition and off-shoring had resulted in externalities such as the erosion of the local tax base in many communities and the accompanying decline of law enforcement, infrastructure, and health services and had a debilitating impact on families and quality of life.

**Preliminary Recommendations:**

- U.S. trade policies have contributed to current high levels of unemployment. The Administration should authorize another unemployment insurance extension in an attempt to provide unemployed workers with a greater amount of time with which to locate employment.
- A new type of education program should be enacted for long-term and effective adjustment to the employment impacts of outsourcing and relocation abroad. Further, a series of Federal and local training programs in coordination with private U.S. firms aimed at tailoring education to meet future needs should be developed.
- The Congress should fund information sessions and a public awareness campaign to inform laid off workers about existing and newly established programs such as Trade Adjustment Assistance (TAA). Petitions for TAA eligibility should be processed expeditiously.

Thank you for your consideration of our recommendations. In addition to the above findings we commend you to also review the record of our September 25, 2003 hearing on China's investment, industrial, and exchange rate policies, our February 5, 2004 hearing on China's WTO compliance and a February 12-13, 2004 field investigation in San Diego on U.S.-China high-technology trade. We hope you will find all of these proceedings helpful as the Congress continues its assessment of the implications of China's growing role in global trade and manufacturing.

Sincerely,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*

*Note:*

*Commissioners Bryen, Reinsch, and Wortzel dissented in whole or in part from the Commission's majority in submitting these preliminary recommendations.*

DECEMBER 23, 2003

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our hearing held December 4, 2003, on "China's Growth as a Regional Economic Power: Impacts and Implications."

As you know, the Commission is mandated by law (P.L. 108–7, Division P) to assess, among other areas, “the extent of China’s ‘hollowing out’ of Asian manufacturing economies, and the impact on United States economic and security interests in the region; [and] review the triangular economic and security relationship among the United States, Taipei and Beijing.” Our hearing was focused on exploring trends in these areas and in the broader spectrum of China’s regional relations.

The December 4th hearing examined from several perspectives the regional impacts of China’s rapid growth as an economic power. Asian governments, the international media, and academic experts have increasingly noted China’s growing importance to trade and investment patterns in Asia. They also note China’s more assertive regional economic diplomacy, including proposals to enter into liberalized trading arrangements with members of the Association of Southeast Asian Nations (ASEAN) and the Shanghai Cooperation Organization (SCO) as well as the countries of Northeast Asia. We asked expert panelists to provide their perspectives on these dynamics and on appropriate U.S. policy responses.

Based on the hearing, we present the following preliminary findings:

- In recent years, China has adopted a softer yet more confident and proactive posture in its relations with its Asian neighbors. China’s various bilateral “partnership” relationships—that once seemed largely symbolic—have gradually taken on greater substance.
- In contrast to fairly passive advocacy in the past, China is now actively promoting the establishment or strengthening of regional multilateral institutions, such as the Shanghai Cooperation Organization in Central Asia and the ASEAN “Plus One” (China) and “Plus Three” (China, Japan, South Korea) partnership fora.
- Some observers conclude that China is filling a void in the region left by U.S. preoccupation with Iraq and the global war on terrorism. China touts its policy of “non-interference” in the internal affairs of other states and contrasts its hands-off approach to that of the U.S., which actively pursues an agenda to combat terrorism and to promote human rights and democratic governance. Aside from reiterating the importance of partners accepting its “One China principle,” China makes few political demands on its Asian neighbors. China does not push human rights, labor or environmental standards in its diplomacy.
- China’s regional strategy appears to be subordinate to its global economic strategy, which is to maintain access to the open multilateral trading system on which its rapid export-driven growth now depends.
- China’s regional strategies are in part driven by its energy security needs, a topic the Commission explored during a hearing on October 30, 2003. For example, major pipeline projects are being planned to connect China to oil and gas fields in Central Asia and the Russian Far East and to establish liquefied natural gas terminals to receive shipments from Australia and Indonesia.

- China's export-driven economic boom has been fueled by a high volume of inward Foreign Direct Investment (FDI), particularly in the wake of China's entry into the World Trade Organization (WTO). In the view of one witness, China's membership in the WTO has sharply reduced the perceived "risk premium" for FDI in China and intensified the trend. This has implications for all regional economies, but especially for the countries of Southeast Asia, which have already experienced a relative decline in FDI flows and could lag behind China in technological progress.
- One panelist noted that "hollowing out" of some industrial sectors in the region was taking place due to China's export drive, attraction of FDI, and development as a major manufacturing power. This was particularly true in Taiwan, which of all the Asian industrial economies has the heaviest "trade dependence" on China, but it also has affected Northeast and Southeast Asian nations. At the same time, panelists acknowledged that for now the high growth in exports from the rest of Asia to "feed" China's manufacturing sector was taking some of the sting out of "hollowing out." The question is whether China will move up the technology ladder to such an extent that its current imports from the rest of Asia will slow or change in composition. Several of our panelists concluded that Japan, South Korea, Taiwan and the ASEAN nations have no choice but to rise to China's challenge by advancing their own technological base, if they want to remain competitive and improve their standards of living.
- In the region there is a disquieting perception that the U.S. was largely indifferent to Asia's fate during the 1997–98 regional financial crisis and has ignored a number of Asia's developmental concerns in its preoccupation with the global war on terrorism and the North Korean nuclear threat.

Some of these dynamics were apparent at the recent APEC meeting in Bangkok where China projected itself as a more attentive and profitable alternative to the U.S., depicting the latter as preoccupied with terrorism and security relations. Many Asian leaders left Bangkok praising Chinese President Hu's economic initiatives and wondering why President Bush seemingly downplayed economic concerns. Likewise, after visits by Presidents Bush and Hu to Australia, the Asian press reviewed Hu's performance more favorably. Such perceptions can limit the U.S. Government's ability to secure the cooperation of Asian nations in achieving our priority objectives.

The implications of China's economic rise vis-à-vis the U.S. are significant. Chinese economic and political practices represent a troublesome alternative to U.S. norms. International labor standards are essentially ignored in the rush for production, transparency is clouded by corruption and insider deals, environmental protection takes a back seat, and democratic principles are suppressed by authoritarian "realism." Yet, the "success" of China's model is no doubt making a strong impression on its Asian neighbors. An important multilateral vehicle that the U.S. could use to reassure Asian partners is APEC—the Asia-Pacific Economic Cooperation forum. APEC should be strengthened by more active

American participation, innovation, and high-level political support for its regional economic agenda. Our long-term economic and security interests in Asia are too important to fall victim to a distracted America.

As the Congress deliberates on issues concerning U.S. interests in Asia and considers how to strengthen American diplomacy in the region, the economic rise of China is a key factor to assess. Through its economic success, China is exercising a more effective and assertive regional diplomacy and exercising enhanced political influence in Asia.

Yours truly,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*

DECEMBER 17, 2003

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit a record of our hearing of October 30, 2003, on China's energy needs and strategies and the implications for global energy markets and China's geopolitical relations.

The Commission's statutory mandate (P.L. 108-7, Division P) calls on us to assess, among other issues, "how China's large and growing economy will impact upon world energy supplies and the role the United States can play, including joint R&D efforts and technological assistance, in influencing China's energy policy." The Commission's mandate further directs it to examine China's economic and strategic relations with its regional neighbors and other countries, of which China's energy policies are an important component.

During our hearing we heard testimony from nine distinguished experts on the economic and security dimensions of China's energy strategies, including Guy Caruso, Administrator of the Department of Energy's Energy Information Administration, and former Director of Central Intelligence R. James Woolsey. The Commission also conducted a luncheon discussion on the geoeconomic and geopolitical aspects of China's energy strategies with former Secretary of Defense and Energy James R. Schlesinger.

The key issue raised in the hearing is whether China will continue to pursue new energy supplies in the Middle East and elsewhere in competition with, or cooperation with, the U.S. and other consuming nations. The continuation of China's unilateral approach could provide additional price leverage for OPEC member countries. It may also encourage China to offer incentives to energy

supplier nations, as it has in the past, including missile and WMD components and technologies, for secure long-term access to energy supplies. This practice substantially undermines U.S. global non-proliferation policies. On the other hand, China could pursue its urgent quest for new energy on a more multilateral basis, working with the U.S. and other nations to manage access to supplies, and put into place, for example, the coordinated release of oil stocks to counter future price spikes. Such cooperation would preferably involve the kind of arrangements already in force within the framework of the International Energy Agency (IEA), benefiting both U.S. energy security and nonproliferation goals. China's extraordinary rate of economic growth has made it a rapidly growing consumer of energy. Currently China stands as the world's second largest consumer of energy (behind the United States) and its third largest consumer of oil (behind the United States and Japan). With this increasing demand has come an increasing reliance on imported energy. China became a net oil importer in 1993 and now imports nearly 2 million barrels per day, projected to increase to more than 6 million barrels per day by 2020, making it a major factor in world energy markets.

China has a comprehensive energy security strategy, consisting of demand reduction, diversification, leveraging bilateral relationships with key Middle East suppliers, building stronger ties with Russia, and establishing a market position in Central Asia. Currently, coal dominates China's energy consumption (65 percent). This poses a tremendous environmental challenge to both China and the world as much of this consumption involves unwashed coal and has led to a surge in air pollution and emissions of greenhouse gases. In this area, China is proceeding with improving its energy efficiency, and its use of clean coal technology, coal liquefaction and gasification and coal-bed methane development, exploration, and production.

Oil is the second largest source of energy for China, accounting for 25 percent of its energy consumption, and China will soon be the world's second largest oil importer after the U.S. The world's major oil importing nations belong to the multilateral framework of the IEA. China is the largest oil-consuming nation that does not participate in the IEA system, including the IEA's coordination of joint releases from strategic reserves to counter politically motivated supply reductions by oil producers. China has opted to pursue bilateral arrangements and investment in energy production and a possible small strategic oil reserve to address its energy security concerns.

To achieve its goal of diversifying oil import sources, and to enhance its energy security, China has entered into energy deals with a number of countries, including some—Iran and Sudan—that are on the State Department's list of terrorist-sponsoring states. These arrangements are troubling, especially to the extent they might involve political accommodations and sales or other transfers of weapons and military technologies to these nations.

In sum, China's growing energy demands, particularly its increasing reliance on oil imports, pose economic, environmental, and geostrategic challenges to the United States. The Commission will continue its thorough examination of China's energy needs and

strategies and advise the Congress as appropriate with regard to developing appropriate U.S. policies to influence China's energy policies in a manner consistent with U.S. interests.

Yours truly,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*

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OCTOBER 14, 2003

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our hearing on September 25, 2003, on "China's Industrial, Investment and Exchange Rate Policies: Impact on the United States." These issues are at the forefront of U.S.-China economic relations, particularly in light of the impact that China's exchange rate and industrial policies are having on global investment trends and on U.S. manufacturing and trade deficits. We are aware that both the Executive Branch and Congress are examining initiatives to address U.S. concerns in this area and therefore we outline here several of the Commission's key findings and recommendations arising from our hearing and research activities to help inform Congressional deliberations.

As you know, the Commission is mandated by law (P.L. 108-7, Division P) to examine, among other areas, China's economic policies and the United States trade and investment relationship with China, including assessing the qualitative and quantitative nature of the shift of United States production activities to China. This latter charge includes examining the relocation of high-technology, manufacturing and R&D facilities to China and the effect of these transfers on United States economic security, employment and the standard of living of the American people.

At our September 25 hearing, the Commission heard testimony from a number of Members of both the House and Senate, including the principal sponsors of various Congressional initiatives designed to address China's exchange rate practices. Representing bipartisan Congressional concerns, these Senators and House Members have introduced differing bills aimed at providing appropriate incentives to the Chinese government to end its apparent mercantilist trade policies, most particularly its artificially undervalued currency, as well as other unfair trade practices such as export subsidies, dumping, and other WTO-inconsistent practices. The Members testified that such practices by China amounted to

a forced redistribution of trading and investment balances that violate the principles of free and fair trade embodied in China's WTO accession obligations as well as in its bilateral trade arrangements with the United States and other international agreements, such as the IMF charter. One result of China's unfair trade practices has been its rapid accumulation of foreign exchange reserves, now totaling some \$355 billion, the second highest in the world after Japan.

*Exchange rate policies.* Based on our examination of this issue, it appears clear that China continues to follow a policy of one-way market interventions by the government to maintain its currency at a level that economists estimate is between 15–40 percent undervalued. In this regard, China is purchasing U.S. dollars at an estimated rate of \$120 billion per year to prevent appreciation of its currency against the dollar. In assessing causes of the worsening U.S. trade deficit and loss of U.S. manufacturing jobs, some hearing witnesses argued that the lack of net new savings in the U.S. economy, the global mobility of factors of production and/or low labor costs in China were the principal factors. In any event, based on the evidence presented, we believe the inappropriate exchange rate between the Chinese yuan and the dollar is negatively impacting the competitiveness of U.S. manufactured goods and is contributing to a migration of world manufacturing capacity to China and an erosion of the U.S. manufacturing base.

Section 3004 of the Omnibus Trade and Competitiveness Act of 1988 (22 U.S.C. Sec. 5304) requires annual reports from the Department of Treasury on foreign countries' exchange rate policies and requires the Secretary to enter into negotiations on an expedited basis with countries found to be manipulating their currencies to gain an unfair competitive trade advantage. Past reports from the Treasury on China have sidestepped this conclusion, which appears now to be inescapable. The Commission believes it is clear that China, in violation of both its IMF and WTO obligations, is in fact manipulating its currency for trade advantage and therefore finds it imperative that the Treasury immediately and forcefully enter into negotiations with the Chinese government to resolve this matter. China's continued maintenance of an undervalued exchange rate with the U.S. dollar will continue to promote major distortions in the flow of trade and investment, to the detriment of American companies and workers, and therefore requires decisive action by Washington.

**Recommendation:** The Treasury Department should make a determination in its foreign country exchange rate report to Congress that China is engaged in manipulating the rate of exchange between its currency and the U.S. dollar to gain an unfair competitive trade advantage and immediately enter into formal negotiations with the Chinese government over this matter. Should these efforts prove ineffective, the Commission urges the Congressional leadership to use its legislative powers to force action by the U.S. and Chinese governments to address this unfair and mercantilist trade practice. For the near future, continued vigorous development of such legislative initiatives as were outlined by Members of Congress during our hearing, linking China's performance on its exchange rate policies to its continued full access

to the U.S. market, appears essential to ensure the appropriate level of effort by both governments to this matter.

*China's Investment and Industrial Policies.* China has attracted a total of over \$400 billion of foreign direct investment (FDI), most of it in the last six years. This compares with \$1.3 trillion for the U.S., \$497 billion for the U.K., \$482 billion for Belgium-Luxembourg, and \$480 billion for Germany. As FDI flows to China are now expanding by over \$50 billion per year, China will soon have accumulated the second largest stock of FDI in the world.

Our hearing indicated that China's undervalued currency is just one of several factors behind that country's success in attracting massive inflows of FDI, particularly into its manufacturing sector. Our hearing examined the extent to which China's industrial policies have played a role. In this regard, we learned that:

- China has pursued industrial policies that have catalyzed its growth as a manufacturing powerhouse, particularly in increasingly higher-technology production. The Chinese government has designated a number of "pillar industries" and pursued a strategy of "picking winners" among China's emerging high-tech or industrial enterprises.
- Manufacturers in China are supported through a wide range of national industrial policies, which include: tariffs; limitations on foreign firms' access to domestic marketing channels; requirements for technology transfer by foreign investors; government selection of partners for major international joint ventures; preferential loans from state banks; privileged access to listings on national and international stock markets; tax relief; privileged access to land; and direct support for R&D from the government budget.

**Recommendation:** The United States Trade Representative and the Department of Commerce should identify whether any of China's industrial policies are inconsistent with its WTO obligations and engage with the Chinese government to mitigate those that are significantly impacting U.S. market access. Appropriate Congressional Committees should be fully briefed on the actions the agencies are taking to resolve these issues.

**Recommendation:** The Commission believes it is essential that U.S. policymakers have a clearer, more comprehensive, and timely picture of global investment and R&D flows to China, particularly in the manufacturing sector. The Commission's 2002 Report to Congress urged Congress to consider establishing an enhanced, mandated corporate reporting system to capture better this information by requiring firms to report "their initial investments in China; any technology transfer, offset, or R&D cooperation agreed to as part of the investment; the shift of production capacity and job relocations resulting from the investment, both from within the United States to overseas and from one overseas location to another; and contracting relationships with Chinese firms." We believe the need for such a system has only increased in urgency since our 2002 Report and again urge Congress to consider taking such action.

*Impact on U.S. Economy.* In his September 15, 2003 prepared remarks at the Detroit Economic Club, Commerce Secretary Don Evans reports that “the President believes that our economic and national security require a stable, robust manufacturing sector that produces sophisticated and strategically significant goods here, in the United States.” Manufacturing employs 14 percent of the American workforce, but has accounted for nearly 90 percent of all the job losses since total U.S. employment peaked in March 2001. Over 2.7 million American factory jobs have been lost over the past three years, roughly one in every six manufacturing jobs.

At our September 25th hearing the Commission heard testimony that supported a conclusion that China’s undervalued currency and government investment strategies are having a deleterious effect on the competitiveness of U.S. manufactured goods and contributing to a migration of world manufacturing capacity to China, with a concurrent erosion of the U.S. manufacturing base.

**Recommendation:** The Commission believes that the President’s pending Manufacturing Initiative should include provisions that strengthen the competitiveness of U.S.-based manufacturers in light of the growing shift of production to China, especially high-tech and R&D. The Initiative should address de facto Chinese government subsidies, particularly those not covered under the WTO, such as tax incentives, preferential access to credit, capital, and materials, and investment conditions requiring technology transfers.

It is the hope of the Commission that the results of this hearing will contribute to the fashioning of legislation by the Congress which will help to illuminate the economic impact that China is having on U.S. producers, better identify unfair Chinese trade practices, and steer Chinese economic practice into more sustainable and fairer channels.

Yours truly,



Roger W. Robinson, Jr.  
Chairman



C. Richard D'Amato  
Vice Chairman

AUGUST 12, 2003

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510.*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House, Washington, D.C. 20515.*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our hearing on July 24, 2003 examining China’s proliferation policies and practices in the post 9/11 era, focusing in particular on its role in the developing North Korean nuclear crisis.

As you know, the Commission is mandated by law (P.L. 108-7, Division P) to “analyze and assess the Chinese role in the proliferation of weapons of mass destruction and other weapons (including dual use technologies) to terrorist-sponsoring states, and suggest possible steps which the United States might take, including economic sanctions, to encourage the Chinese to stop such practices.” The Commission heard testimony from current and previous Administration and Intelligence Community officials, as well as a range of outside experts, on the current state of Chinese proliferation practices, on the events unfolding with regard to North Korea’s nuclear program and on the implications of these developments for U.S. national security.<sup>1</sup>

We addressed the efforts of the Chinese government in the post 9/11 period to curtail its proliferation practices, which have served as an issue of contention for many years, the quality of its enforcement of newly-established export controls for weapons of mass destruction (WMD), and the effectiveness of current U.S. sanctions laws and practices. Witnesses provided a number of recommendations for encouraging the Chinese government to strengthen its commitment to curtail such proliferation activities, and to address continuing shortcomings of its export control system, as well as to review the adequacy of the Non-Proliferation Treaty.

China’s role in cooperating with the United States in addressing the North Korean nuclear crisis was a priority issue in the hearing, given the urgency of this national security challenge. The scope and secrecy of its nuclear weapons program, coupled with a North Korean history of deception and lack of respect for agreements it has previously entered into, its willingness to export missiles and components of WMD, its economic dependence on those exports, and the potential for North Korea to become a near-term exporter of fissile materials as well as complete nuclear weapons are clearly a matter of supreme importance for the U.S. Therefore, the Commission believes the extent of Chinese cooperation in achieving an irreversibly de-nuclearized Korean peninsula is a key, if not the key, test of the U.S.-China relationship in the current period. China’s recent diplomatic efforts in helping to secure North Korea’s agreement to engage in the upcoming multiparty talks is encouraging, but must be followed up by the active use of its substantial leverage to persuade North Korea to freeze its reprocessing efforts and dismantle its nuclear weapons and ballistic missile programs, and to accommodate an intrusive international verification regime, which ensures the effective implementation of any agreement that is ultimately reached.

The stakes of the upcoming multiparty talks for U.S. national security and, indeed, the viability of nonproliferation programs globally, are enormous. Given those stakes, and the long history of Congress’ involvement in fashioning and approving agreements dealing with arms control and issues of such national importance, we, the Chairman and Vice Chairman, believe that the building of a bipartisan consensus underpinning the goals and outcome of such negotiations argues for an early, informed and reinforcing role for

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<sup>1</sup>The classified portion of this hearing record, at the codeword level, is also available for the use of Congressional Committees and cleared staff in S-407, the Capitol.

the Congress. If Congress is fully engaged and vested in any future agreement with North Korea it would substantially improve prospects for a durable consensus between the two branches on this vital matter.

Yours truly,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*

JULY 3, 2003

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the second volume of our hearings, those conducted by the Commission from September 23, 2002 through June 5, 2003, pursuant to P.L. 106-398 (October 30, 2000), as amended by P.L. 107-67 and 108-7.

As you know, the U.S.-China Economic and Security Review Commission is mandated by Congress to examine, among other areas, media control in China and to make recommendations to the Congress on this issue where appropriate.

On June 5, 2003 the Commission held a hearing on China's media and information control system, with particular emphasis on Internet censorship. As demonstrated in response to the recent SARS outbreak in China, such censorship is pervasive and continuous, and the Chinese government puts a high priority on its control mechanisms. The hearing reinforces our understanding that promising technologies recently developed by U.S. companies demonstrate the capability of breaking through this Chinese Internet firewall with a high degree of confidence, based on actual performance over the last year. We believe that the provision of additional modest financial resources in FY 2004 to these efforts could result in dramatic increases in the number of users in China who would be able to access uncensored information on the Internet. We have been told by U.S. Government officials working in this area, as well as knowledgeable private entrepreneurs involved in Internet anti-censorship efforts, that such efforts could result in reaching critical thresholds of Chinese Internet users whereby the information control system of the Chinese government would be greatly degraded. Some U.S. firms working on such initiatives have told us that this level of resources could allow them to expand uncensored Internet access to some 1.5-2 million Chinese Internet users. Authorizing legislation—the "Global Internet Freedom Act"—has been introduced on a bipartisan basis in both chambers and is aimed at enhancing the U.S. Government's resources and capabilities to pro-

mote the development and use of technologies to allow access to the worldwide web by users in closed societies throughout the world.

On December 11, 2002, the Commission took testimony from Ms. HE Qinglian, a well-known dissident who emigrated to the U.S. in 2001, and Mr. CHENG Xiaonong, Princeton University, to discuss “Corruption’s Impact on Governance, Politics, and Policies” in China. The third hearing included in this document during this reporting period focused on “Chinese Leadership Succession and Its Implications.”

To date, the Commission has held twelve hearings and the Commission published the first volume of its record of public hearings, which were enormously valuable in informing the Commission and the public on the evolving relationship between the United States and the China, particularly in the economic arena. We plan to publish quarterly reports and transcripts of our hearings. Congress mandated nine specific areas for the Commission’s work in 2003–2004, including proliferation practices, economic reforms and U.S. economic transfers, energy, role of U.S. capital markets, corporate reporting, regional economic and security impacts, U.S.-China bilateral programs, WTO compliance, and media control by the Chinese government. The congressional mandate specifying the areas of work and study the Commission will focus on begins on page 235. The Commission plans to issue its second annual report to Congress in April 2004.

Yours truly,



Roger W. Robinson, Jr.  
*Chairman*



C. Richard D'Amato  
*Vice Chairman*



## **APPENDIX III BACKGROUND ON COMMISSIONERS**

### **ROGER W. ROBINSON, JR., CHAIRMAN**

Chairman Roger W. Robinson, Jr., was reappointed to the U.S.-China Economic and Security Review Commission by Senate Majority Leader Bill Frist on May 7, 2003, for a three-year term expiring December 31, 2005.

Chairman Robinson is President and CEO of Conflict Securities Advisory Group, Inc. ([www.conflictsecurities.com](http://www.conflictsecurities.com)), a Washington, D.C.-based company that offers impartial research and advisory services in the field of global security risk management (i.e., the links of publicly-traded companies to terrorist-sponsoring states and proliferation-related concerns). He is also President of RWR Inc., a consulting firm established in 1985 that provides strategic planning services and analyses of breaking geopolitical developments that could potentially impact on international equity, debt, and currency markets.

Prior to forming these firms, Chairman Robinson was Senior Director of International Economic Affairs at the National Security Council. He worked at the White House from March 1982 until September 1985. Between January 1984 and April 1985, Chairman Robinson also served as Executive Secretary of the Senior Interdepartmental Group-International Economic Policy, a Cabinet-level body that reported through the National Security Council (NSC) to the President. As Senior Director, Chairman Robinson had responsibility for all economic, financial, trade, and energy relationships of the United States worldwide for NSC.

Prior to joining the NSC staff, Chairman Robinson was a Vice President in the International Department of the Chase Manhattan Bank in New York City. As a banker, he had responsibilities for Chase's loan portfolio in the USSR, Eastern and Central Europe, and Yugoslavia for five years. He also served for some two and a half years as a staff assistant to former Chase Chairman David Rockefeller and earlier on assignment with the Chase branch in Tokyo.

Chairman Robinson has published extensively on security-related risk in the global capital markets and earlier on East-West economic and financial relations. He has served as an expert witness on numerous occasions before both Senate and House committees. In addition, he is a frequent radio commentator and makes regular broadcast media appearances.

Chairman Robinson holds a B.A. from Duke University and an M.A. in international affairs from the George Washington University. He served for some seven years as a member of the Board of Visitors at the Sanford Institute of Public Policy at Duke University and presently serves on other Boards. Chairman Robinson is

also co-founder of the Prague Security Studies Institute in the Czech Republic.

**HON. C. RICHARD D'AMATO, VICE CHAIRMAN**

Vice Chairman C. Richard D'Amato was reappointed to the U.S.-China Economic and Security Review Commission by Senate Democratic Leader Tom Daschle on March 25, 2003, for a three-year term expiring December 31, 2005. He served as the Chairman and Vice Chairman of the Commission beginning in April 2001. He is an attorney, and a member of the Maryland and D.C. bars. He is a former delegate to the General Assembly of the State of Maryland, (1998–2002), representing the Annapolis, Maryland, region, and served on the Appropriations Committee. He is also a retired captain in the United States Navy Reserve, served two tours of duty in the Vietnam theatre aboard the USS KING (DLG-10), and three years as an Assistant Professor of Government at the U.S. Naval Academy. He served on the Trade Deficit Review Commission, a Congressional advisory body, as a member from 1999–2000.

From 1988–98, Vice Chairman D'Amato was the Democratic Counsel for the Committee on Appropriations of the United States Senate. He was responsible for coordinating and managing the annual appropriations bills and other legislation on policy and funding of U.S. defense, foreign policy, trade and intelligence matters. He served from 1980–88 as senior foreign policy and defense advisor to the Democratic Senate leader, Senator Robert C. Byrd. In this position, he supervised work on major foreign policy, national security and trade policies, and was the co-director for the Senate Arms Control Observer Group, a bipartisan leadership organization, which served as liaison with the White House on all arms control negotiations with the Soviet Union. He also served on the Senate delegation to the Kyoto negotiations on Global Warming.

Vice Chairman D'Amato began his career as Legislative Director for Congressman James Jeffords (Ind.-VT) from 1975–78, and then as Chief of Staff for Senator Abraham Ribicoff (D-CT) until 1980.

He has been active in other aspects of public service, having founded the annual Taste-of-the-Nation dinners in Annapolis as part of the nationwide "Share Our Strength" hunger relief organization, and created an annual scholarship for college bound African-American women in Anne Arundel County, Maryland. He currently serves on the boards of the Annapolis Symphony Orchestra, the Chesapeake Bay Trust, The Johns Hopkins Cuba Exchange Program, and the University of Oxford Congressional Visitors program.

Vice Chairman D'Amato received his B.A. (cum laude) from Cornell University in 1964, and served on the Cornell Board of Trustees' Advisory Council. He received his M.A. from the Fletcher School of Law and Diplomacy in Boston in 1967, and received his legal education from Harvard Law School and from the Georgetown University Law Center (JD, 1980). He resides in Annapolis with his wife, Dee.

**CAROLYN BARTHOLOMEW**

Commissioner Carolyn Bartholomew was reappointed to the U.S.-China Economic and Security Review Commission on Decem-

ber 16, 2003, by House Democratic Leader Nancy Pelosi for a two-year term expiring December 31, 2005.

Commissioner Bartholomew worked at senior levels in the U.S. Congress, serving as long-term Counsel, Legislative Director, and most recently, Chief of Staff, to U.S. House of Representatives Democratic Leader Nancy Pelosi. She also served as a Professional Staff Member on the House Permanent Select Committee on Intelligence. Previously, she was a legislative assistant to then-U.S. Representative Bill Richardson.

In these positions, Commissioner Bartholomew was integrally involved in developing U.S. policies on international affairs and security matters. She has particular expertise in U.S.-China relations, focused primarily on trade, human rights, and the proliferation of weapons of mass destruction. Commissioner Bartholomew was a lead staff on legislation to establish the Department of Homeland Security and led efforts in the establishment and funding of global AIDS programs and the promotion of human rights and democratization in countries around the world. Commissioner Bartholomew also staffed negotiations for the International Monetary Fund recapitalization. Commissioner Bartholomew was a member of the first Presidential Delegation to Africa to Investigate the Impact of HIV/AIDS on Children; and a member of the Council on Foreign Relations Congressional Staff Roundtable on Asian Political and Security issues. In addition to U.S.-China relations, her areas of expertise include terrorism, trade, proliferation of weapons of mass destruction, human rights, U.S. foreign assistance programs, and international environmental issues.

Commissioner Bartholomew received her B.A. from the University of Minnesota, graduating cum laude in 1979. She received her M.A. in 1984 from Duke University and received her J.D. from Georgetown University Law Center in 1994. She is a member of the State Bar of California.

#### **GEORGE BECKER**

Commissioner George Becker was reappointed to the U.S.-China Economic & Security Review Commission by Democratic Leader Nancy Pelosi for a three-year term expiring December 31, 2005. He previously served on the Commission as a member beginning February 2001 through January 7, 2003.

A second-generation steelworker, Commissioner Becker grew up across the street from Granite City Steel in Illinois, where he went to work with an open-hearth labor gang at age fifteen during the summer of 1944. From that beginning, Commissioner Becker rose through the ranks until being elected in 1993 and again in 1997 for two terms as the sixth international president of the United Steelworkers of America (USWA), representing 750,000 industrial workers in the U.S. and Canada.

Prior to being named to the Commission, Commissioner Becker completed a congressional appointment on the U.S. Trade Deficit Review Commission in 2000. He also served appointments during the Clinton administration to the President's Export Council and the U.S. Trade and Environmental Policy Advisory Committee. As an AFL-CIO vice president and executive council member, Commissioner Becker chaired the national labor federation's powerful

Economic Policy Committee. He was a leader in the 1995 revitalization of the AFL-CIO that elected John Sweeney as the current president.

Commissioner Becker was elected two terms in 1985 and 1989 as the USWA's international vice president for administration. While vice president, he headed the union's organizing program and the Aluminum Industry Conference for collective bargaining. Among several corporate campaigns he led involving major labor disputes, the best known was against Ravenswood Aluminum Corp. that achieved the historic firing of 1,300 permanent scab replacement workers and the return to work of 1,600 steelworkers after a twenty-month lockout that ended in 1992.

His working class background includes employment as a crane operator at General Steel Castings and an assembler at General Motors' Fisher Body plant in St. Louis. After serving in the Marine Corps, Commissioner Becker became active in the USWA while an inspector at Dow Chemical's aluminum rolling mill in Madison, IL., where he was elected as the Local 4804 president. He was appointed a USWA staff representative in 1965, negotiating labor contracts and developing a reputation as an expert on occupational health issues. His interest in job safety took him to the union's Pittsburgh headquarters as a technician in the Safety and Health Dept.

He helped establish some of the first national health standards adopted by the U.S. Occupational Safety and Health Administration for workers exposed to lead, arsenic, and other toxic substances.

Commissioner Becker's USWA presidency has been marked by many major achievements, including a major restructuring of the USWA's regional districts and executive board; mergers of the 98,000-member United Rubber Workers in 1995 and the 40,000-member Aluminum, Brick and Glass Workers in 1997; plus a successful twenty-eight-month worldwide campaign for a labor agreement and the return to work of 6,000 permanently terminated workers at Bridgestone/Firestone Corp.

He served as the executive committee member of the Geneva-based International Metalworkers Federation and chairman of the world rubber council of the International Federation of Chemical, Energy, Mine and General Workers' Unions in Brussels.

#### **STEPHEN D. BRYEN, PH.D.**

Commissioner Stephen D. Bryen was reappointed to the U.S.-China Economic and Security Review Commission for a three-year term expiring on December 31, 2005, by Speaker Dennis Hastert, U.S. House of Representatives. He previously served as a member of the Commission from April 2001 through January 7, 2003.

Commissioner Bryen is the President of Finmeccanica, Inc. Finmeccanica, Inc., represents Finmeccanica S.p.A. in the United States. The company manufactures defense, aerospace and commercial products. Dr. Bryen is a former Deputy Under Secretary of Defense and Founder and First Director of the Defense Technology Security Administration.

**JUNE TEUFEL DREYER, PH.D.**

Commissioner June Teufel Dreyer was reappointed to the U.S.-China Economic and Security Review Commission by Speaker of the House Dennis Hastert on January 23, 2004, for a two-year term expiring December 31, 2005.

Commissioner Dreyer is Professor and Chair of the Department of Political Science at the University of Miami, Coral Gables, Florida. Dr. Dreyer is also a Senior Fellow of the Foreign Policy Research Institute. She received her Bachelor's degree from Wellesley College and her master's and Ph.D. degrees from Harvard University. Dr. Dreyer formerly served as Senior Far East Specialist at the Library of Congress and Asia advisor to the Chief of Naval Operations. Her research work centers on ethnic minorities; the Chinese military; Asian-Pacific regional relations; and Taiwan politics. A frequent visitor to the Far East, Dr. Dreyer is the author of *China's Forty Millions: Minority Nationalities and National Integration in the People's Republic of China*, published by Harvard University Press, and *China's Political System: Modernization and Tradition*, published by Longman and now in its fourth edition. Her articles have appeared in numerous scholarly journals. She and her husband, Dr. Edward Dreyer, have two children.

**HON. ROBERT F. ELLSWORTH**

Ambassador Robert Ellsworth was appointed to the U.S.-China Economic and Security Review Commission on May 7, 2003, by Senate Majority Leader Bill Frist to term expiring December 31, 2004.

Ambassador Ellsworth is currently Chairman and Founding Partner of Hamilton Apex Technology Ventures, LP, a San Diego, CA, private venture capital fund, and Director of Price Communications Corporation, New York, NY. He is a Member of the U.S.-Russia RAND Business Leaders Forum. His distinguished service in the U.S. Government includes serving as Assistant Secretary, then Deputy Secretary, of Defense, U.S. Ambassador to NATO, Assistant to the President, and a Member of the U.S. House of Representatives (KS). He has received the Presidential National Security Medal, U.S. Department of Defense Medal for Distinguished Public Service, and honorary degrees from the University of Ottawa and Boston University. He is also a recipient of the Knight of Honor, Knightly Order of St. John, Berlin, Germany.

Ambassador Ellsworth's career in business includes being a general partner at Lazard Freres & Co., Chairman of Fairchild Space and Defense Corp and Howmet Corporation, and a board member of the Hamilton Group, Price Communications Corporation, Voice Compression Technologies, Inc., Warner Communications, Inc., General Dynamics Corporation, Allied Chemical, the Aerospace Corporation, and DBA Systems, Inc.

Ambassador Ellsworth is Vice President (and former Chairman of the Council 1990-96) of the International Institute for Strategic Studies in London, Vice Chairman of The Nixon Center, Director of the Atlantic Council of the United States, and a member of the Council on Foreign Relations.

Ambassador Ellsworth served two tours of duty as an officer in the U.S. Navy. He received a BSME from the University of Kansas

and a J.D. from the University of Michigan. He is admitted to the Bar of the U.S. Supreme Court, as well as the highest courts of Massachusetts, Kansas and the District of Columbia.

#### **HON. PATRICK A. MULLOY**

Commissioner Patrick A. Mulloy was reappointed to the U.S.-China Economic and Security Review Commission on March 25, 2003, by Senate Democratic Leader Tom Daschle to a two-year term expiring on December 31, 2004. Commissioner Mulloy previously served as a member from April 2001 to January 7, 2003.

Prior to assuming his current responsibilities, Commissioner Mulloy was nominated by President Clinton and confirmed by the U.S. Senate as Assistant Secretary for Market Access and Compliance in the Department of Commerce's International Trade Administration, where he served from 1998 to 2001. In that position, Commissioner Mulloy directed a trade policy unit of over two hundred international trade specialists, which focused worldwide on removing foreign barriers to U.S. exports and on ensuring that foreign countries comply with trade agreements negotiated with the United States. This latter activity involved discussions both in the World Trade Organization (WTO) and with individual governments. He traveled extensively, meeting with foreign leaders to advance market-opening programs in the European Union, Eastern Europe, China, India, Taiwan, Indonesia, Canada, and Central and South America. He was also appointed by President Clinton to serve as a member of the Commission on Security and Cooperation in Europe.

Prior to his employment as Assistant Secretary, Commissioner Mulloy served fifteen years in various senior positions on the staff of the U.S. Senate Banking Committee, including Chief International Counsel and General Counsel. In those positions, he contributed to much of the international trade and finance legislation formulated by the Committee such as the Foreign Bank Supervision Enhancement Act of 1991, the Export Enhancement Act of 1992, the Defense Production Act Amendments of 1994, and titles of the Omnibus Trade and Competitiveness Act of 1988 dealing with foreign bribery, exchange rates, international debt, and export controls.

Before coming to the Senate, Commissioner Mulloy served as a senior attorney in the Antitrust Division of the U.S. Department of Justice, where he directed a staff of lawyers and economists, which supervised participation by U.S. oil companies in the Paris-based International Energy Agency (IEA). In earlier duties at the Justice Department, he represented the United States in a variety of cases related to Federal environmental laws, including criminal and civil enforcement actions in various U.S. District Courts, several Circuit Courts of Appeal, and the U.S. Supreme Court.

Commissioner Mulloy began his public service career as a Foreign Service Officer at the U.S. Department of State, where he served in the Office of U.N. Political Affairs, the Office of International Environmental and Oceans Affairs, and as Vice Consul in the U.S. Consulate General in Montreal, Canada.

Commissioner Mulloy, a native of Kingston, Pennsylvania, holds an LL.M. from Harvard University Law School, a J.D. from George

Washington University Law School, an M.A. from the University of Notre Dame, and a B.A. from King's College.

He is presently an adjunct professor of international trade law at the law schools of both Catholic University and George Mason University, and periodically lectures on trade and financial matters at the National Defense University's Industrial College of the Armed Forces.

He resides in Alexandria, Virginia, with his wife, Marjorie, and they have three children.

#### **HON. WILLIAM A. REINSCH**

Commissioner William A. Reinsch was reappointed to the U.S.-China Economic and Security Review Commission by Senate Democratic Leader Tom Daschle on January 20, 2004 for a two-year term expiring December 31, 2005.

On April 2, 2001, Commissioner Reinsch joined the National Foreign Trade Council as President. The council, founded in 1914, is the only business organization dedicated solely to trade policy, export finance, international tax, and human resource issues. The organization represents over 350 companies through its offices in New York and Washington, D.C.

As president, Commissioner Reinsch oversees NFTC's efforts in favor of open markets, in support of Export-Import Bank and Overseas Private Investment Corporation, and as head of the USA Engage and Foreign Sales Corporation (FSC) coalitions, among many other international trade and tax issues of concern to U.S. business.

Prior to joining the National Foreign Trade Council, Reinsch served as Under Secretary for Export Administration in the U.S. Department of Commerce. As head of the Bureau of Export Administration, he was charged with administering and enforcing the export control policies of the U.S. government, as well as its anti-boycott laws. In addition, the bureau is part of an interagency team helping Russia and other newly emerging nations develop effective export control systems and convert their defense industries to civilian production. Through its Office of Strategic Industries and Economic Security, the bureau is also responsible for monitoring and protecting the health of U.S. industries critical to our national security and defense industrial base and assisting in domestic defense conversion efforts. Major accomplishments during his tenure included: refocusing controls in light of economic globalization, most notably on high-performance computers, microprocessors, encryption, and other items; the first complete revision of the Export Administration regulations in over forty years; revising the interagency process for reviewing applications; permitting electronic filing of applications over the Internet; and increasing the bureau's budget by 87 percent.

From 1991 through 1993, Commissioner Reinsch was a senior Legislative Assistant to Senator John D. Rockefeller IV, responsible for the senator's work on trade, international economic policy, foreign affairs, and defense. He also provided staff support for Senator Rockefeller's related efforts on the Finance Committee and the Commerce, Science, and Transportation Committee.

From 1977 to 1991, Commissioner Reinsch served on the staff of the late Senator John Heinz as Chief Legislative Assistant, focusing on foreign trade and competitiveness policy issues. During that period, Senator Heinz was either Chairman or ranking minority member of the Banking Committee's Subcommittee on International Finance. He was also a member of the International Trade Subcommittee of the Finance Committee. Commissioner Reinsch provided staff support for the Senator on both subcommittees, which included participation in five revisions of the Export Administration Act and work on four major trade bills. Prior to 1977, Commissioner Reinsch was a Legislative Assistant to Representatives Richard Ottinger and Gilbert Gude, acting Staff Director of the House Environmental Study Conference, and a teacher in Maryland.

During his tenure as Under Secretary, Commissioner Reinsch delivered more than two hundred speeches and testified fifty-three times before various committees of Congress. His recent publications include "Why China Matters to the Health of the U.S. Economy," in *Economics and National Security: The Case of China*, 2002; "The Role and Effectiveness of U.S. Export Control Policy in the Age of Globalization," *The Monitor* (Center for International Trade and Security, spring 2000); "Export Controls in the Age of Globalization," *The Monitor* (Center for International Trade and Security, summer 1999); "Should Uncle Sam Control U.S. Technology Exports?" *Insight Magazine*, September 8, 1997; "Encryption Policy Strikes a Balance," *Journal of Commerce*, March 5, 1997; "Building a New Economic Relationship with Japan," in I.M. Destler and Yankelovich, D., eds., *Beyond the Beltway: Engaging the Public in U.S. Foreign Policy*, W.W. Norton, April 1994.

In addition to his legislative work, Commissioner Reinsch has served as an adjunct associate professor at the University of Maryland University College Graduate School of Management and Technology since 1990, teaching a course in international trade and trade policy. He is also President of the Saint Mark Elderly Housing Corporation, a non-profit corporation that runs Saint Mark House, a home for the frail elderly in Rockville, Maryland.

Commissioner Reinsch received a B.A. degree in International Relations from the Johns Hopkins University and an M.A. degree from the Johns Hopkins School of Advanced International Studies. He lives in Bethesda, Maryland, with his wife and two sons.

#### **MICHAEL R. WESSEL**

Commissioner Michael R. Wessel was appointed to the U.S.-China Economic and Security Review Commission by House Democratic Leader Nancy Pelosi on April 29, 2003 for a two-year term expiring December 31, 2004.

Commissioner Wessel is a Senior Vice President at the Downey McGrath Group, Inc., a public affairs consulting firm offering expertise in government, politics, and international affairs. He served on the staff of House Democratic Leader Richard A. Gephardt for more than twenty years, leaving his position as General Counsel in March 1998. In addition to his duties as General Counsel, Commissioner Wessel was Mr. Gephardt's chief policy advisor, strategist, and negotiator. He was responsible for the development, coordina-

tion, management, and implementation of the Democratic Leader's overall policy and political objectives, with specific responsibility for international trade, finance, economics, labor, and taxation.

During his more than twenty years on Capitol Hill, Commissioner Wessel served in a number of positions: He was Mr. Gephardt's principal Ways and Means aide, where he developed and implemented numerous tax and trade policy initiatives. He participated in the enactment of every major trade policy initiative from 1978 to his departure in 1998. In the late 1980s, he was the Executive Director of the House Trade and Competitiveness Task Force, where he was responsible for the Democrats' trade and competitiveness agenda as well as overall coordination of the Omnibus Trade and Competitiveness Act of 1988. The National Journal wrote: Commissioner Wessel is "generally credited in Washington trade circles with having helped to keep Gephardt ahead of the curve on major issues."

He was intimately involved in the development of comprehensive tax reform legislation in the early 1980s and every major tax bill during his tenure. Beginning in 1989, he became the principal advisor to the Democratic Leadership on economic policy matters and served as tax policy coordinator to the 1990 budget summit. In 1995, he developed the 10 percent Tax Plan, a comprehensive tax reform initiative that would enable roughly four out of five taxpayers to pay no more than a ten percent rate in federal income taxes. It became the principal Democratic tax reform alternative. In 1988, he served as National Issues Director to Gephardt's Presidential campaign. During the 1992 Clinton/Gore campaign, he assisted on a broad range of issues and served as a Senior Policy Advisor to the Clinton/Gore transition office. After leaving Mr. Gephardt's staff, Commissioner Wessel opened his own consulting firm, where he provided strategic advice to a number of business, political, and labor organizations. He also served as a Visiting Fellow at the Washington, DC-based Economic Policy Institute and currently maintains an affiliation with the Institute.

He has coauthored a number of articles with Democratic Leader Gephardt and a book, *An Even Better Place: America in the 21st Century* (Public Affairs, 1999). Commissioner Wessel served as a Commissioner of the congressional U.S.-China Economic and Security Review Commission from April 2001 to January 7, 2003, and was reappointed for a two-year term by House Minority Leader Nancy Pelosi on April 29, 2003. Commissioner Wessel served as a member of the U.S. Trade Deficit Review Commission in 1999-2000, a congressionally created commission charged with studying the nature, causes and consequences of the U. S. merchandise trade and current account deficits.

Commissioner Wessel holds a B.A. and a J.D. from George Washington University. He is a member of the bar of the District of Columbia and Pennsylvania. He and his wife Andrea have four children.

**LARRY M. WORTZEL, PH.D.**

Commissioner Larry M. Wortzel was appointed to the U.S.-China Economic and Security Review Commission on November 9, 2001, and reappointed on May 6, 2003 by House Speaker Dennis Hastert for a term expiring December 31, 2004.

Commissioner Wortzel is the Vice President and Director of The Kathryn and Shelby Cullom Davis Institute for International Studies at The Heritage Foundation, an influential think tank based in Washington, DC. He previously served as the Director of the Asian Studies Center at the Foundation. Since 1983, the Center has addressed a broad range of policy issues affecting U.S.-Asia relations. Its policy recommendations-based on rigorous analyses of Asian political, military, and economic realities- seek to advance freedom and democracy throughout the Asian region while safeguarding American security.

A leading authority on China, Asia, intelligence, national security, and military strategy, Commissioner Wortzel joined Heritage in November 1999 upon completing a distinguished thirty-two-year career in the U.S. armed forces. His last military position was as director of the Strategic Studies Institute of the U.S. Army War College.

Following three years in the Marine Corps and a stint in college, Commissioner Wortzel enlisted in the U.S. Army in 1970. His first assignment with the Army Security Agency took him to Thailand, where he focused on Chinese military communications in Vietnam and Laos. Within three years, he had graduated Infantry Officer Candidate School, as well as both Airborne and Ranger schools. After serving four years as an infantry officer in Korea and at Fort Benning, Georgia, he shifted to military intelligence. Wortzel traveled regularly to throughout Asia while serving the U.S. Pacific Command as a political-military affairs analyst from 1978 to 1982. The following year he attended the National University of Singapore, where he studied advanced Chinese and traveled in China and Southeast Asia. He next worked for the Under Secretary of Defense for Policy, developing counterintelligence programs to protect emerging defense technologies from foreign espionage. In addition, for the Army Intelligence and Security Command, he managed programs to gather foreign intelligence.

From 1988 to 1990, Commissioner Wortzel was Assistant Army Attaché at the U.S. Embassy in China, where he witnessed and reported on the Tiananmen Massacre. After assignments as an Army strategist and managing worldwide assignments for Army intelligence officers, he returned to China in 1995 as the Army Attaché. In December 1997, he became a faculty member of the U.S. Army War College, serving as director of the Strategic Studies Institute. He retired from the Army as a colonel.

Commissioner Wortzel's books include *Class in China: Stratification in a Classless Society* (Greenwood Press, 1987), *China's Military Modernization: International Implications* (Greenwood, 1988), *The Chinese Armed Forces in the 21st Century* (Carlisle, PA, 1999), and *Dictionary of Contemporary Chinese Military History* (Greenwood, 1999). He regularly publishes articles and monographs on Asian security matters.

A graduate of the Armed Forces Staff College and the U.S. Army War College, Commissioner Wortzel earned his B.A. from Columbus College, Georgia, and his M.A. and Ph.D. from the University of Hawaii. He and his wife, Christine, have two married sons and one grandson.

**APPENDIX IV  
PUBLIC HEARINGS AND  
TECHNICAL BRIEFINGS OF THE COMMISSION**

Full transcripts and written testimonies are available online at  
the Commission's Web site: [www.uscc.gov](http://www.uscc.gov).

**April 16, 2004: Public Hearing on  
"China's Presence in the Global Capital Markets,"  
Washington, DC**

Commissioners present: Roger W. Robinson Jr. (Hearing Co-Chair), Chairman; C. Richard D'Amato, Vice Chairman; Carolyn Bartholomew, George Becker, June Teufel Dreyer, Patrick A. Mulloy, William A. Reinsch, Michael R. Wessel (Hearing Co-Chair).

Witnesses: Pieter Bottelier, the Johns Hopkins University and Georgetown University; William Gamble, Emerging Market Strategies; Tim Halter, USX China Index; Amit Tandon, New York Global Securities; Thomas Byrne, Moody's Investor Service; Nell Minow, The Corporate Library; Jeffrey Fiedler, FAST, AFL-CIO; Norman Bailey, The Potomac Foundation.

**February 12-13, 2004: Public Hearing on  
"China as an Emerging Regional and Technology Power:  
Implications for U.S. Economic and Security Interests,"  
San Diego, California**

Commissioners present: C. Richard D'Amato (Hearing Co-Chair), Vice Chairman; Carolyn Bartholomew, George Becker, June Teufel Dreyer, Robert F. Ellsworth (Hearing Co-Chair), Patrick A. Mulloy, Larry M. Wortzel.

Witnesses: Dean Peter Cowhey, Graduate School of International Relations and Pacific Studies, University of California San Diego; Barry Naughton, Ph.D., University of California San Diego; Scott Rozelle, Ph.D., University of California Davis; K.C. Fung, Ph.D., University of California Santa Cruz; Gordon Hanson, University of California San Diego; Stephan Haggard, Ph.D., University of California San Diego; Richard Feinberg, Ph.D., University of California San Diego; Greg Lucier, Invitrogen Corporation; Joseph Panetta, BIOCUM; Kerry Dance, Ph.D., Hamilton Apex Technology Ventures, LP; William Bold, QUALCOMM, Inc.; Jason Dedrick, University of California Irvine; Francine Berman, Ph.D., University of California San Diego; Michael May, Ph.D., Stanford University; Susan Shirk, Ph.D., University of California San Diego; Ellis

Krauss, Ph.D., University of California San Diego; David M. Lampton, Ph.D., the Johns Hopkins University.

**February 6, 2004: Public Hearing on  
“Military Modernization and Cross-Strait Balance,”  
Washington, DC**

Commissioners present: Roger W. Robinson Jr., Chairman; C. Richard D’Amato, Vice Chairman; Stephen D. Bryen, June Teufel Dreyer, Robert F. Ellsworth (Hearing Co-Chair), Patrick A. Mulloy, William A. Reinsch, Larry M. Wortzel (Hearing Co-Chair).

Witnesses: Richard P. Lawless, Department of Defense; Randall G. Schriver, Department of State; Ambassador Harvey J. Feldman, The Heritage Foundation; Denis Van Vranken Hickey, Southwest Missouri State College; John F. Copper, Rhodes College; Richard D. Fisher, Jamestown Foundation, Center for Security Policy; David Finkelstein, Center for Naval Analysis Corporation; Evan Medeiros, RAND Corporation; Jason E. Bruzdinski, The MITRE Corporation; Vincent Wei-cheng Wang, Ph.D., University of Richmond; Lyle J. Goldstein, U.S. Naval War College; William Murray, U.S. Naval War College.

**February 5, 2004: Public Hearing on  
“China and the WTO: Compliance and Monitoring,”  
Washington, DC**

Commissioners present: Roger W. Robinson Jr., Chairman; C. Richard D’Amato, Vice Chairman; George Becker, June Teufel Dreyer, Patrick A. Mulloy (Hearing Co-Chair), William A. Reinsch (Hearing Co-Chair), Michael R. Wessel, Larry M. Wortzel.

Witnesses: James Jochum, Department of Commerce; Charles Freeman, U.S. Trade Representative; Patricia R. Sheikh, Department of Agriculture; Randall Shriver, Department of State; Terrance P. Stewart, Stewart and Stewart Law Offices; Robert Cassidy, International Trade Services; Robert Kapp, U.S.-China Business Council; Richard Trumka, AFL-CIO; Robert Vastine, Coalition of Service Industries; Robert Carolson, National Farmers Union; William Primosch, National Association of Manufacturers; Eric Smith, International Intellectual Property Alliance; Anne Craib, Semiconductor Industry Association; Ann Wroblewski, American Forest and Paper Association.

**January 30, 2004: Public Hearing on  
“China’s Impact on the U.S. Manufacturing Base,”  
Columbia, South Carolina**

Commissioners present: Roger W. Robinson Jr., Chairman (Hearing Co-Chair); C. Richard D’Amato, Vice Chairman; Carolyn Bartholomew, George Becker (Hearing Co-Chair), June Teufel Dreyer, Patrick A. Mulloy, William A. Reinsch, Michael R. Wessel.

Congressional Perspectives: Ernest F. Hollings, U.S. Senator from South Carolina; Lindsey O. Graham, U.S. Senator from South Carolina.

Witnesses: Norman Chapman, Inman Mills; Sarah Friedman, Southeastern Apparel Manufacturers and Suppliers Association (SEAMS); Larry Crolley, Craig Industries; Harris Raynor, Union of Needletrades, Industrial and Textile Employees (UNITE); Smyth McKissick, Alice Manufacturing Company, and representing American Textile Manufacturers Institute (ATMI); Bob Johns, Nucor Corporation.; Timothy J. Dillon, Commercial Georgetown Steel Company, LLC; Larry Murray, United Steelworkers of American (USWA); Donna DeWitt, South Carolina AFL-CIO; Jon T. McClure, ISO Poly Films, Inc.; J. Richard Dillard, Milliken & Company and South Carolina Chamber of Commerce; Jack Hutchison, Georgetown County Economic Development Commission; Evans Tindal, Cheraw Yarn Mills; Larry Martin, State Senator from South Carolina.

**December 4, 2003: Public Hearing on  
“China’s Growth as a Regional Economic Power:  
Impacts and Implications,”  
Washington, DC**

Commissioners present: Roger W. Robinson Jr., Chairman; C. Richard D’Amato, Vice Chairman; Carolyn Bartholomew (Hearing Co-Chair), George Becker, June Teufel Dreyer (Hearing Co-Chair), Patrick A. Mulloy, William A. Reinsch, Michael R. Wessel, Larry M. Wortzel.

Witnesses: Bates Gill, Ph.D., Center for Strategic and International Studies; John J. Tkacik, Jr., The Heritage Foundation; Wing Thyee Woo, Ph.D., University of California at Davis and Center for Globalization and Sustainable Development; Merritt T. (Terry) Cooke, Foreign Policy Research Institute; Peter C.Y. Chow, Ph.D., City College and Graduate Center, City University of N.Y.; Edward J. Lincoln, The Council on Foreign Relations; L. Gordon Flake, The Maureen and Mike Mansfield Foundation; Naoko Munakata, Japan Visiting Scholar, Sigur Center for Asian Studies, The George Washington University; Wang Gungwu, Ph.D., East Asian Institute, University of Singapore; David I. Steinberg, Ph.D., School of Foreign Service, Georgetown University; Martha O. Blaxall, Ph.D., School of Advanced International Studies; Rollie Lal, Ph.D., RAND Corporation.

**October 30, 2003: Public Hearing on  
“China’s Energy Needs and Strategies,”  
Washington, DC**

Commissioners present: Roger W. Robinson Jr., Chairman; C. Richard D’Amato, Vice Chairman; Carolyn Bartholomew, George Becker, June Teufel Dreyer, Michael A. Ledeen (Hearing Co-Chair), Patrick A. Mulloy, William A. Reinsch, Michael R. Wessel (Hearing Co-Chair).

Witnesses: Guy Caruso, Energy Information Administration; Amy Myers Jaffe, James A. Baker III Institute for Public Policy; Kang Wu, Ph.D., China Energy Project, East-West Center; Dean P. Girdis, PFC Energy; R. James Woolsey, Booz Allen & Hamilton; Robert E. Ebel, Center for Strategic and International Studies; Ed-

ward L. Morse, Hess Energy Trading Company; Kent E. Calder, Reischauer Center for East Asian Studies, Johns Hopkins University; Constantine C. Menges, Hudson Institute. Luncheon Speaker: The Honorable James R. Schlesinger, Chairman, Board of Trustees, The Mitre Corporation.

**September 25, 2003: Public Hearing on  
“China’s Industrial, Investment, and Exchange Rate  
Policies: Impact on the United States,”  
Washington, DC**

Commissioners present: Roger W. Robinson Jr., Chairman; C. Richard D’Amato, Vice Chairman; Carolyn Bartholomew, George Becker, June Teufel Dreyer (Hearing Co-Chair), Robert F. Ellsworth, Patrick A. Mulloy (Hearing Co-Chair), William A. Reinsch, Michael R. Wessel, Larry M. Wortzel.

Statements by Senators and Representatives: Phil English, U.S. Representative from Pennsylvania; Lindsey Graham, U.S. Senator from South Carolina; Charles Stenholm, U.S. Representative from Texas; Byron L. Dorgan, U.S. Senator from North Dakota; Charles E. Schumer, U.S. Senator from New York; Donald A. Manzullo, U.S. Representative from Illinois; Sander (Sandy) M. Levin, U.S. Representative from Michigan.

Witnesses: C. Fred Bergsten, International Institute for Economics; Stephen S. Roach, Morgan Stanley; David Hale, Hale Advisors, LLC; Ernest H. Preeg, Ph.D., Manufacturers Alliance/MAPI; Peter H. Nolan, Ph.D., University of Cambridge; Edward S. Seinfeld, Massachusetts Institute of Technology; Kathleen A. Walsh, The Henry L. Stimson Center; Paul Craig Roberts, Ph.D., Institute for Political Economy; Franklin J. Vargo, National Association of Manufacturers; Thea M. Lee, AFL–CIO; Willard A. Workman, U.S. Chamber of Commerce.

**July 24, 2003: Public Hearing on  
“China’s Proliferation Practices and the  
North Korean Nuclear Crisis,”  
Washington, DC**

Commissioners present: Roger W. Robinson Jr., Chairman; C. Richard D’Amato (Hearing Co-Chair), Vice Chairman; Carolyn Bartholomew, George Becker, Stephen D. Bryen, June Teufel Dreyer, Robert F. Ellsworth (Hearing Co-Chair), Patrick A. Mulloy, William A. Reinsch, Michael R. Wessel.

Witnesses: Paula A. DeSutter, Department of State; Ambassador Stephen Bosworth, Dean, Fletcher School of Law and Diplomacy; Ambassador Wendy Sherman, The Albright Group; Fred C. Ikle, The Center for Strategic and International Studies (CSIS); Robert J. Einhorn, CSIS; Leonard S. Spector, Center for Nonproliferation Studies, Monterey Institute; John Olsen, Sandia National Laboratories. Luncheon Speakers: Madeleine Albright, former Secretary of State, Principal, The Albright Group; and The Honorable Fred Thompson, former U.S. Senator.

**June 5, 2003: Public Hearing on  
“SARS in China: Implications for Information Control,  
Internet Censorship, and the Economy,”  
Washington, DC**

Commissioners present: Roger W. Robinson Jr., Chairman (Hearing Co-Chair); C. Richard D’Amato, Vice Chairman (Hearing Co-Chair); George Becker, Stephen D. Bryen, June Teufel Dreyer, Robert F. Ellsworth, Michael A. Ledeen, Patrick A. Mulloy, William A. Reinsch, Michael R. Wessel, Larry M. Wortzel.

Statements by Senators and Representatives: Conrad Burns, U.S. Senator from Montana; Bill Nelson, U.S. Senator from Florida; Jon Kyl, U.S. Senator from Arizona; Christopher Cox, U.S. Representative from California.

Witnesses: Jay Henderson, VOA; Dan Southerland, Radio Free Asia; Ken Berman, International Broadcasting Bureau; Qiang Xiao, University of California at Berkeley; Bill Xia, Dynamic Internet Technology; Erping Zhang, Association for Asian Research; Dr. Maochun Yu, U.S. Naval Academy; Dr. Yuanli Liu, Harvard; Andy Rothman, Credit Lyonnais Securities Asia; Dong Tao, Credit Suisse First Boston.

**December 11, 2002: Technical Briefing on  
“Corruption’s Impact on Governance, Politics and Policies,”  
Washington, DC**

Commissioners present: Roger W. Robinson Jr., Chairman; C. Richard D’Amato, Vice Chairman; George Becker, June Teufel Dreyer, Kenneth Lewis, Patrick A. Mulloy, Arthur Waldron, Michael R. Wessel, Larry M. Wortzel.

Witnesses: He Qinglian; Cheng Xiaonong, Princeton University.

**September 23, 2002: Public Hearing on  
“Chinese Leadership Succession and its Implications,”  
Washington, DC**

Commissioners present: C. Richard D’Amato, Chairman (Hearing Co-Chair); George Becker, Stephen D. Bryen, June Teufel Dreyer (Hearing Co-Chair), Kenneth Lewis, Patrick A. Mulloy, William A. Reinsch, Roger W. Robinson Jr., Michael R. Wessel, Larry M. Wortzel.

Witnesses: Willy Wo-lap Lam, CNN; Bruce Gilley, Author; Prof. Cheng Li, Hamilton College and Woodrow Wilson Center; Prof. Shaomin Li, Old Dominion University; Dr. Andrew Scobell, Army War College.



## APPENDIX V LIST OF RESEARCH MATERIAL

The material listed below is available online at the Commission's Web site [www.uscc.gov](http://www.uscc.gov). The research papers were prepared at the request of the Commission to support its deliberations and are intended to promote greater public understanding of the issues addressed by the Commission. However, inclusion in the Report does not imply an endorsement by the Commission or any individual Commissioner of views expressed in the material.

### Commissioned Research Papers

- Fisher, Richard D. Jr. "The Impact of Foreign Weapons and Technology on the Modernization of China's People's Liberation Army." January 2004.
- Fisher, Richard D. Jr. "New Developments in Russia-China Military Relations: A Report on the August 19–23, 2003 Moscow Aerospace Salon (MAKS)." September 3, 2003.
- Lenz, Allen. "China's World Trade and Investment: An Overview." October 2003.
- McMillion, Charles W. "Briefing paper for the Commission's field investigation on China's Impact on the U.S. Manufacturing Base." MBG Information Services, January 30, 2004.
- Pillsbury, Michael P. "The U.S. Role in Taiwan's Defense Reforms." Remarks presented at the Institute for Taiwan Defense and Securities Studies Conference, Taipei, Taiwan, February 29, 2004.
- Stewart, Terence P. "China's Compliance with World Trade Organization Obligations: A Review of China's 1st Two Years of Membership." Stewart and Stewart, March 19, 2004.

### Translated Articles

All the papers and articles by Chinese authors listed below were screened and/or translated by a research team headed by Maochun Yu, Ph.D., U.S. Naval Academy, from open sources on the Chinese Internet.

- "China's Future Route to Maritime Dominance." *People's Daily* (Beijing), January 10, 2004, Strong China Forum [Qiangguo Luntan].  
<<http://www.qglt.com/bbs/ReadFile?whichfile=9884&typeid=38>>.

- “China’s Worries at Sea.” *Global Times [Huanqiu Shibao]*, reprinted in the *People’s Liberation Daily*, January 2, 2004.
- Gang, Ding. “What’s Wrong with the Sino-U.S. Trade Relation?” *The Global Times [Huanqiu Shibao]*, December 2, 2003, <[http://finance.anhuinews.com/ahnews/article/20031202/20031200505779\\_1.html](http://finance.anhuinews.com/ahnews/article/20031202/20031200505779_1.html)>.
- Ni, Lexiong. “The Sino-U.S. Relation and Its Structural Clash.” *The Global Times [Huanqiu Shibao]*, 2004, <<http://www.ccrs.org.cn>>.
- “The Worrisome Situation of the South China Sea—China Facing the Stepped-up Military Infiltration by the U.S., Japan and India.” *Outlook East Weekly [Liaowang Dongfang Zhoukan]*, January 12, 2004 <<http://army.tom.com>>.
- Yu, Ma. “On the Manifestations and Origin of Sino-U.S. Trade Disputes.” *Chinese Economic Times [Zhongguo Jingji Shibao]*, December 1, 2003, <<http://www.china.org.cn/chinese/OP-c/452411.htm>>.
- Yue, Jianyong. “The United States and China in the Age of Globalization.” *Chinese Political Science*, July 27, 2003, <<http://www.ccrs.org.cn/2233/ReadNews.asp?NewsID=1238&BigClassName=&BigClassID=24&SmallClassID=40&SmallClassName=&SpecialID=22>>.
- Zhang, Bisen. “China Should Abandon the Foreign Policy of ‘Taoguang Yanghui’” [“Bide our Time, Build our Capacities.”] *Chinese Political Science*, May 17, 2003, <<http://www.ccrs.org.cn/2233/ReadNews.asp?NewsID=212>>.

## **APPENDIX VI ABBREVIATIONS**

ABC	Agricultural Bank of China
ADR	American Depository Receipt
APEC	Asia Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ATP	advanced technology product
BBG	Broadcasting Board of Governors
bcm	billion cubic meters
Bl/d	barrels per day
BOC	Bank of China
BTU	British thermal unit
BWC	Biological Weapons Convention
CCB	China Construction Bank
CCT	Clean Coal Technology
CEO	chief executive officer
CEPA	Closer Economic Partnership Arrangement
CFIUS	Committee on Foreign Investments in the United States
CIA	Central Intelligence Agency
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Company
CPMIEC	China Precision Machinery Import/Export Corporation
CRS	Congressional Research Service
CSRC	China Securities Regulatory Commission
CTCL	China Telecom Corporation Limited
CWC	Chemical Weapons Convention
DCI	Director of Central Intelligence
DOE	Department of Energy
DPRK	Democratic People's Republic of Korea (North Korea)
DVD	digital videodisk
EIA	Energy Information Administration
EIU	Economist Intelligence Unit
EPI	Economic Policy Institute
EU	European Union
FBI	Federal Bureau of Investigation
FBIS	Foreign Broadcast Information Service
FDI	foreign direct investment
FTA	free trade agreement
GAO	General Accounting Office
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
HTI	Hydrocarbon Technologies, Inc.
IAEA	International Atomic Energy Association
ICBC	Industrial and Commerce Bank of China

IEEPA	International Economic Emergency Powers Act
IEA	International Energy Agency
IEO	International Energy Outlook
IIPA	International Intellectual Property Alliance
IMF	International Monetary Fund
IPO	initial public offering
IPR	intellectual property rights
IT	information technology
ITC	International Trade Commission
JCCT	Joint Commission on Commerce and Trade
LNG	liquid natural gas
Mb/d	million barrels a day
MFA	Multifiber Arrangement
MFN	most-favored-nation
MND	Ministry of National Defense
MOFTEC	Ministry of Foreign Trade and Economic Cooperation
MOU	memorandum of understanding
MTCR	Missile Technology Control Regime
NAM	National Association of Manufacturers
NEMA	National Electrical Manufacturers Association
NATO	North Atlantic Treaty Organization
NME	nonmarket economy
NORINCO	China North Industries Corporation
NPCSC	National People's Congress Standing Committee
NPL	nonperforming loan
NPT	Nuclear Nonproliferation Treaty
NSC	National Security Council
NT	New Taiwan (Dollars)
NYSE	New York Stock Exchange
OECD	Organization for Economic Cooperation and Development
OPEC	Overseas Petroleum Exporting Countries
PCCW	Pacific Century Cyber Works
PICC	Property and Casualty Co.
PLA	People's Liberation Army
PNTR	permanent normal trade relations
PRC	People's Republic of China
PSI	Proliferation Security Initiative
QFII	qualified foreign institutional investor
R&D	research and development
RFA	Radio Free Asia
ROK	Republic of Korea
RTC	Resolution Trust Corporation
S&L	savings and loan
S&T	science and technology
SAR	Special Administrative Region
SARS	severe acute respiratory syndrome
SCO	Shanghai Cooperation Organization
SEC	Securities and Exchange Commission
SETC	State Economic and Trade Commission
SIA	Semiconductor Industry Association
SIE	state-invested enterprise
SMIC	Semiconductor Manufacturing International Corp.
SOE	state-owned enterprises

SPS	sanitary and phytosanitary
SRBM	short-range ballistic missile
TBP	tributyl phosphate
TRA	Taiwan Relations Act
TRIPS	Trade-related Aspects of Intellectual Property Rights
TRM	transitional review mechanism
TRQ	tariff-rate quota
UAE	United Arab Emirates
UAV	unmanned aerial vehicle
USTR	U.S. Trade Representative
USWA	United Steelworkers of America
VOA	Voice of America
WHO	World Health Organization
WTO	World Trade Organization
WMD	weapons of mass destruction

## COMMISSION STAFF

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## ACKNOWLEDGEMENTS

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A special thanks to the research fellows, interns and others who assisted the Commissioners, analysts, and staff of the Commission during this Report cycle by preparing research material and background information and providing program and administrative support for the briefings and public hearings. They included: Brian Brereton, Anthony Greenberg, Craig Lipman, Kenneth Mangin, Clare (Ye) Sheng, Lauren Tabak, and Kori Urayama; Daniel O. Dwyer and Michael Palmer; Cole Buerger, Drew Burns, Kaitlyn Chiang, Christopher M. Close, Kristen Cummings, Andrew Fenwick, Matthew J. Friend, Sophia S. Hong, Adam Murray, Rebecca Puckett, Jonathan Satinsky, and Daniel Strouhal.